

SECTION 06200

FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Exterior standing and running trim.
 - 2. Exterior plywood ceilings
 - 3. Interior standing and running trim.
 - 4. Non-fire-rated wood door frames.
 - 5. Shelving and clothes rods.
 - 6. Stairs and railings.
 - 7. Decking.
 - 8. Wood fence.

- B. Related Sections include the following:
 - 1. Division 1 Section "Alternates" for information on alternate pertaining to this section.

1.2 DEFINITIONS

- A. Inspection agencies, and the abbreviations used to reference them, include the following:
 - 1. NELMA - Northeastern Lumber Manufacturers Association.
 - 2. NHLA - National Hardwood Lumber Association.
 - 3. NLGA - National Lumber Grades Authority.
 - 4. WCLIB - West Coast Lumber Inspection Bureau.
 - 5. WWPA - Western Wood Products Association.

1.3 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Include construction details, material descriptions, dimensions of individual components and profiles, textures, and colors.

- B. Samples for Selection:
 - 1. For each species and cut of lumber and panel products with nonfactory-applied finish, with 1/2 of exposed surface finished, 50 sq. in. (300 sq. cm) for lumber and 8 by 10 inches (203 by 250 mm) for panels.
 - 2. For each finish system and color of lumber and panel products with factory-applied finish, 50 sq. in. (300 sq. cm) for lumber and 8 by 10 inches (203 by 250 mm) for panels.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed finish carpentry work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Fire-Test-Response Characteristics: Where fire-retardant materials are indicated, provide materials with specified fire-test-response characteristics as determined by a testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency on surfaces of materials that will be concealed from view after installation.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect materials against weather and contact with damp or wet surfaces. Stack lumber, plywood, and other panels. Provide for air circulation within and around stacks and under temporary coverings.
- B. Deliver interior finish carpentry only when environmental conditions meet requirements specified for installation areas. If finish carpentry must be stored in other than installation areas, store only where environmental conditions meet requirements specified for installation areas.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install interior finish carpentry until building is enclosed and weatherproof, wet work in space is completed and nominally dry, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit work to be performed according to manufacturer's written instructions and warranty requirements and at least one coat of specified finish to be applied without exposure to rain, snow, or dampness.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Lumber: DOC PS 20 and applicable grading rules of inspection agencies certified by the American Lumber Standards' Committee Board of Review.
 - 1. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
 - 2. For exposed lumber, mark grade stamp on end or back of each piece, or omit grade stamp and provide certificates of grade compliance issued by inspection agency.

2.2 DECKING

- A. Exterior Decking: Trex composite decking, or approved substitute with radius edges.

2.3 INTERIOR STANDING AND RUNNING TRIM

- A. Wood Trim for Opaque Finish (Painted): Finished lumber (S4S), either finger-jointed or solid lumber, of the following species and grades:
 - 1. Grade: Premium or No. 2 eastern white pine or poplar; NELMA or NLGA.
- B. Moldings: Made to patterns by Brockway Smith Company. Wood moldings made from kiln-dried stock.
 - 1. Moldings for Opaque Finish (Painted): P-grade eastern white pine.
 - 2. Molding Pattern: As indicated on the drawings.

2.4 NON-FIRE-RATED DOOR FRAMES

- A. Frames, complete with casings, fabricated from pine frame, machined for 1-3/8 and 1-3/4 inch thick door, clear material, to accommodate wall thickness indicated.
 - 1. Rabbeted Jamb: Provide 1-1/4 inch thick, pine, unless noted otherwise.
 - 2. Split Jamb: Provide 1-1/8 inch thick, pine, where indicated on the drawings.
 - 3. Casing: 8710 (colonial), clear, applied two sides, one side where noted for closets.

2.5 FIXED SHELF AND POLE

- A. Wire shelving system by ClosetMaid.

2.6 STAIRS AND RAILINGS

- A. Interior Railings: Clear, kiln-dried red oak of pattern indicated, either solid or laminated.
- B. Skirts: Painted wood interior trim.

2.7 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: Provide nails or screws of the following materials, in sufficient length to penetrate minimum of 1-1/2 inches (38 mm) into substrate, unless otherwise recommended by manufacturer:
 - 1. Stainless steel.
- B. Fasteners for Interior Finish Carpentry: Nails, screws, and other anchoring devices of type, size, material, and finish required for application indicated to provide secure attachment, concealed where possible.
 - 1. Where finish carpentry materials are exposed in areas of high humidity, provide fasteners and anchorages with hot-dip galvanized coating complying with ASTM A 153/A 153M.

- C. Fasteners for Exterior Decking: Provide No. 7 galvanized trim-head screws, 2-1/2 inches long. Provide Fastenmaster TrapEase composite decking screws by Olympic Fasteners.
- D. Sealants: Comply with requirements in Division 7 Section "Joint Sealants" for materials required for sealing siding work.
- E. Coat Hooks:
 - 1. Type 1: Peter Pepper, No. 2043 black finished aluminum knob.

2.8 FABRICATION

- A. Wood Moisture Content: Comply with requirements of specified inspection agencies and with manufacturer's written recommendations for moisture content of finish carpentry at relative humidity conditions existing during time of fabrication and in installation areas.
- B. Ease edges of lumber less than 1 inch (25 mm) in nominal thickness to 1/16-inch (1.5-mm) radius and edges of lumber 1 inch (25 mm) or more in nominal thickness to 1/8-inch (3-mm) radius.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of projections and substances detrimental to application.
- B. Before installing finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours.
- C. Prime lumber for exterior applications to be painted, including both faces and edges. Cut to required lengths and prime ends. Comply with requirements in Division 9 Section "Painting."

3.3 INSTALLATION, GENERAL

- A. Do not use materials that are unsound, warped, improperly treated or finished, inadequately seasoned, or too small to fabricate with proper jointing arrangements.
 - 1. Do not use manufactured units with defective surfaces, sizes, or patterns.
- B. Install finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
 - 1. Scribe and cut finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.

2. Countersink fasteners, fill surface flush, and sand where face fastening is unavoidable.
3. Install to tolerance of 1/8 inch in 96 inches (3 mm in 2438 mm) for level and plumb. Install adjoining finish carpentry with 1/32-inch (0.8-mm) maximum offset for flush installation and 1/16-inch (1.5-mm) maximum offset for reveal installation.
4. Coordinate finish carpentry with materials and systems in or adjacent to it. Provide cutouts for mechanical and electrical items that penetrate finish carpentry.

3.4 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Do not use pieces less than 24 inches (610 mm) long, except where necessary. Stagger joints in adjacent and related standing and running trim. Cope at returns and miter at corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints. Plane backs of casings to provide uniform thickness across joints, where necessary for alignment.
 1. Match color and grain pattern across joints.
 2. Install trim after gypsum board joint finishing operations are completed.
 3. Drill pilot holes in hardwood before fastening to prevent splitting. Fasten to prevent movement or warping. Countersink fastener heads on exposed carpentry work and fill holes.

3.5 STAIR FRAMING INSTALLATION

- A. Provide stair framing members of size, space, and configuration indicated or, if not indicated, to comply with the following requirements:
 1. Stringer Size: 2-by-12-inch nominal- (38-by-286-mm actual-) size, minimum.
 2. Notching: Notch stringers to receive treads, risers, and supports; leave at least 3-1/2 inches (89 mm) of effective depth.
 3. Stringer Spacing: At least 3 stringers for each 36-inch (914-mm) clear width of stair.
- B. Provide stair framing with no more than 3/16-inch (4.7-mm) variation between adjacent treads and risers and no more than 3/8-inch (9.5-mm) variation between largest and smallest treads and risers within each flight.

3.6 STAIR AND RAILING INSTALLATION

- A. Railings: Secure wall rails with metal brackets. Fasten freestanding railings to newel posts and to trim at walls with countersunk-head wood screws or rail bolts, and glue. Assemble railings at goosenecks, easements, and splices with rail bolts and glue.

3.7 DECKING

- A. Install decking in accordance with manufacturer's recommendations.
- B. Decking to span a minimum of three framing members.
- C. Pre-drill holes for fasteners and provide 1 inch clearance from deck edges.

- D. Gapping: Provide the following gaps at sides and ends of decking:
1. Sides: 1/4 inch gap for installation temperature above 40 deg F; 3/8 inch gap for installation temperature below 40 deg F.
 2. End-to-End: 1/8 inch gap for installation temperature above 60 deg F; 3/16 inch gap for installation temperature below 60 deg F.
 3. Abutting Solid Objects: 1/4 inch gap for installation temperature above 60 deg F; 1/2 inch gap for installation temperature below 60 deg F.

3.8 ADJUSTING

- A. Replace finish carpentry that is damaged or does not comply with requirements. Finish carpentry may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing. Adjust joinery for uniform appearance.

3.9 CLEANING

- A. Clean finish carpentry on exposed and semiexposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

3.10 WASTE MANAGEMENT

- A. Separate wood waste in accordance with the Waste Management Plan.
- B. Separate the following categories for salvage or reuse on site:
1. Sheet materials larger than 2 square feet.
 2. Framing members longer than 16 inches.
 3. Multiple cutoffs of any size larger than 12 inches.
- C. Recycle the following categories:
1. Clean, unpainted engineered wood products.
 2. Clean, unpainted dimensional lumber.
- D. Separate the following categories for disposal and place in designated areas for hazardous materials:
1. Treated, stained, painted, or contaminated wood.
- E. Close and seal tightly all partly used adhesive containers and store protected in well-ventilated, fire-safe area at moderate temperatures.
- F. Place used adhesive tubes and containers in areas designated area for hazardous materials.

END OF SECTION