

SECTION 062000 – FINISH CARPENTRY

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Interior Trim
- B. Finish carpentry items
- C. **Exterior Benches**

1.2 RELATED REQUIREMENTS

- A. Product Data: For each type of process and factory-fabricated product.
- B. Samples: For each type.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials, dimensions, profiles, textures, and colors and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained. Include chemical treatment manufacturer's written instructions for finishing treated material.
 - 2. Include data for fire-retardant treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements.
 - 3. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced before shipment to Project site to levels specified.
- C. Samples for Initial Selection: For each type of product involving selection of colors, profiles, or textures.

1.4 INFORMATIONAL SUBMITTALS

- A. Compliance Certificates:
 - 1. For lumber that is not marked with grade stamp.
 - 2. For preservative-treated wood that is not marked with treatment-quality mark.
 - 3. For fire-retardant-treated wood that is not marked with classification marking of testing and inspecting agency.

B. Evaluation Reports: For the following, from ICC-ES:

1. Wood-preservative-treated wood.
2. Fire-retardant-treated wood.
3. Cellular PVC trim.
4. Foam plastic moldings.

C. Sample Warranties: For manufacturer's warranties.

1.6 QUALITY ASSURANCE

A. Testing Agency Qualifications: For testing agency providing classification marking for fire retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

B. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.

C. Vendor Qualifications: A vendor that is certified for chain of custody by an FSC-accredited certification body.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Stack lumber, plywood, and other panels flat with spacers between each bundle to provide air circulation. Protect materials from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

1.8 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecast weather conditions permit work to be performed and at least one coat of specified finish can be applied without exposure to rain, snow, or dampness.

1. For exterior ornamental wood columns, comply with manufacturer's written instructions and warranty requirements.

B. Do not install finish carpentry materials that are wet, moisture damaged, or mold damaged.

1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Lumber: DOC PS 20.

1. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
 - a. 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.
- B. Softwood Plywood: DOC PS 1.
- C. Hardboard: AHA A135.4.
- D. MDF: ANSI A208.2, Grade 130 .
- E. Particleboard: ANSI A208.1, Grade M-2.
- F. Melamine-Faced Particleboard: Particleboard complying with ANSI A208.1, Grade M-2, finished on both faces with thermally fused, melamine-impregnated decorative paper and complying with requirements of NEMA LD3, Grade VGL, for test methods 3.3, 3.4, 3.6, 3.8, and 3.10.
 1. Color: As selected by Architect from manufacturer's full range.

2.2 FIRE-RETARDANT-TREATED MATERIALS

- A. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84, with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.
 1. Kiln dry lumber and plywood after treatment to a maximum moisture content of 19 and 15 percent respectively.
- B. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.
 1. For exposed lumber and plywood indicated to receive a stained or natural finish, mark back of each piece.
- C. Application: Where indicated.

2.3 INTERIOR TRIM

- A. Hardwood Lumber Trim (**painted wall base**):
 1. Species and Grade: **WD-1 (see finish schedule on sheet I110)**; Clear; NHLA.
 2. Maximum Moisture Content: 13 percent.
- B. Hardwood Moldings for Transparent Finish (Clear Finish): WMMPA HWM 2, N-grade wood moldings made to patterns included in WMMPA HWM 1.

1. Species: **WD-1 (see finish schedule on sheet I110).**
 2. Maximum Moisture Content: 9 percent.
- C. Moldings for Opaque Finish (Painted Finish): Made to patterns included in WMMPA WM 12.
1. Hardwood Moldings: WMMPA HWM 2, P-grade.
 - a. Species: **WD-1 (see finish schedule on sheet I110).**
 - b. Maximum Moisture Content: 9 percent.
- D. Molding Patterns:
1. Base Pattern: **As indicated on drawings.**
 2. Shoe-Mold Pattern: **Not used.**
 3. Chair-Rail Pattern: **Not used.**

2.4 PANELING

- A. Hardwood Veneer Plywood Paneling: Manufacturer's stock hardwood plywood panels complying with HPVA HP-1. **WD-1 (see finish schedule on sheet I110)**
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Chesapeake Hardwood Products, Inc.
 2. Georgia-Pacific Building Products.
 3. Holland Southwest International.
- C. Board Paneling:
1. Species and Grade: **WD-1 (see finish schedule on sheet I110);** NeLMA, NLGA, or WWPA.
 2. Maximum Moisture Content: 15 percent.

2.5 SHELVING

- A. Shelving: Made from following materials, 3/4 inch thick.
4. Hardwood Boards (**Exposed to View**): **WD-1;** NLGA, WCLIB, or WWPA;; SPIB; kiln dried.
- B. Shelf Brackets with Rod Support: BHMA A156.16, B04051; prime-painted formed steel.

2.6 EXTERIOR BENCHES

- A. **Exterior Benches: WD-2, Made from the following materials, 3/4 inch thick.**
1. **IPE Boards (Exposed to View): IPE 2"x2"x 8 feet long; NLGA, WCLIB, or WWPA;; SPIB; kiln dried.**

2.7 MISCELLANEOUS MATERIALS

- A. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer for general carpentry use.
- B. Paneling Adhesive: Comply with paneling manufacturer's written recommendations for adhesives.

2.8 FINISH (FOR WD-1 – NATURAL LOOK)

- A. Grade: **No. 2 with exposed knots. Fill knots with black epoxy filler as required**
- B. Finish: **Two coats 2000 Flat Water based Polyurethane.**
- C. Staining: **Two coats natural sealer with whitener.**
- D. Effect: **Open-grain finish.**
- E. Sheen: **Satin.**

2.9 FINISH (FOR WD-1 – PAINTED)

- A. Grade: **No. 2 with exposed knots. Fill knots with wood filler as required**
- B. Finish: **Two coats paint**
- C. Prime: **Prime base coat**
- D. Effect: **Solid color**
- E. Sheen: **Satin.**

2.10 FINISH (FOR WD-1 – PAINT WASH FOR CHILDREN'S WOOD SHELVING)

- A. Grade: **No. 2 with exposed knots. Fill knots with wood filler as required**
- B. Finish: **Two paint wash**
- C. Prime: **None**
- D. Effect: **Washed color look where see grain through wash**
- E. Sheen: **Satin.**

2.11 FINISH (FOR WD-2)

- A. Grade: **No. 1.**
- B. Finish: **Two coats Messmer's U.V. Plus Natural for wood decks.**
- C. Staining: **None.**
- D. Effect: **Open-grain finish.**
- E. Sheen: **Natural.**

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installing interior finish carpentry, condition materials to average prevailing humidity in installation areas for a minimum of 24 hours unless longer conditioning is recommended by manufacturer.

3.2 INSTALLATION, GENERAL

- A. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
 - 1. Scribe and cut interior finish carpentry to fit adjoining work. Refinish and seal cuts as recommended by manufacturer.
 - 2. Countersink fasteners, fill surface flush, and sand unless otherwise indicated.
 - 3. Install to tolerance of 1/8 inch in 96 inches for level and plumb. Install adjoining interior finish carpentry with 1/32-inch maximum offset for flush installation and 1/16-inch maximum offset for reveal installation.
 - 4. Install stairs with no more than 3/16-inch variation between adjacent treads and risers and with no more than 3/8-inch variation between largest and smallest treads and risers within each flight.

3.3 STANDING AND RUNNING TRIM INSTALLATION

- A. Install with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Miter at returns, miter at outside corners, and cope at inside corners to produce tight-fitting joints with full-surface contact throughout length of joint. Use scarf joints for end-to-end joints.

3.4 PANELING INSTALLATION

- A. Plywood Paneling: Select and arrange panels on each wall to minimize noticeable variations in grain character and color between adjacent panels. Leave 1/4-inch gap to be covered with trim at top, bottom, and openings. Install with uniform tight joints between panels.
 - 1. Attach panels to supports with manufacturer's recommended panel adhesive and fasteners. Space fasteners and adhesive as recommended by panel manufacturer.
 - 2. Conceal fasteners to greatest practical extent.
- B. Hardboard Paneling: Install according to manufacturer's written recommendations. Leave 1/4-inch gap to be covered with trim at top, bottom, and openings. Butt adjacent panels with moderate contact. Use fasteners with prefinished heads matching paneling color.
- C. Board Paneling: Arrange in random-width pattern suggested by manufacturer unless boards or planks are of uniform width.

1. Install in full lengths without end joints.
2. Stagger end joints in random pattern to uniformly distribute joints on each wall.
3. Select and arrange boards on each wall to minimize noticeable variations in grain character and color between adjacent boards. Install with uniform tight joints between boards.
4. Fasten paneling by face nailing, setting nails, and filling over nail heads.
5. Fasten paneling with trim screws, set below face and filled.
6. Fasten paneling by blind nailing through tongues.

3.5 SHELVING

- A. Cut shelf cleats at ends of shelves about 1/2 inch less than width of shelves and sand exposed ends smooth.
- B. Install shelf cleats by fastening to framing or backing with finish nails or trim screws, set below face and filled. Space fasteners not more than 16 inches o.c.
- C. Cut shelves to neatly fit openings with only enough gap to allow shelves to be removed and reinstalled. Install shelves, fully seated on cleats, brackets, and supports.

END OF SECTION 062023