SECTION 06200 - FINISH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Interior standing and running trim for field-stained finish.
2. Interior plywood paneling and trim.
3. Shelving and clothes rods.
4. Stairs railings.
5. Manufactured base and wall cabinets.
6. Plam countertops.

B. Related Sections include the following:

1. Division 6 Section "Rough Carpentry" for furring, blocking, and other carpentry work not exposed to view.

1.3 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.

1.4 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 Initial Selection: Color charts consisting of actual materials in small sections for paneling and plam for each type of material indicated.

C. Samples for Verification:

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. for lumber and 8 by 10 inches for panels.
2. For each finish system and color of lumber and panel products with factory-applied finish, 50 sq. in. for lumber and 8 by 10 inches for panels.

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.

PART 2 - PRODUCTS

2.1 INTERIOR STANDING AND RUNNING TRIM

A. Softwood Lumber Trim for Transparent Finish (Stain or Clear Finish): Kiln-dried finished lumber (S4S) of the following species and grades:

1. Grade Premium or 2 Common eastern white pine; NELMA or NLGA.

B. Hardwood Lumber Trim for Transparent Finish (Stain or Clear Finish): Clear, kiln-dried, white maple finished lumber (S4S).

C. Lumber Trim for Opaque Finish (Painted): Finished lumber (S4S), either finger-jointed or solid lumber, of the following species and grades:

1. Grade Premium or 2 Common eastern white pine; NELMA or NLGA.

D. Moldings: Made to patterns included in WMMPA WM 7. Wood moldings made from kiln-dried stock and graded under WMMPA WM 4.

1. Moldings for Transparent Finish (Stain or Clear Finish): N-grade eastern white, ponderosa, or sugar pine yellow poplar.

a. Provide material selected for compatible grain and color.

2. Interior Moldings for Transparent Finish (Stain or Clear Finish): N-grade poplar or eastern white.
a. Scotia Molding: Brosco 8059
b. Half Round: Brosco 8080
c. Crown: Brosco Poplar B-614

2.2 PANELING

A. Hardwood Veneer Plywood Paneling: Manufacturer's stock hardwood plywood panels complying with applicable requirements in HPVA HP-1, made without urea-formaldehyde adhesive.

1. Face Veneer Species: Rotary-cut white birch.
2. Backing Veneer Species: Any hardwood compatible with face species.
3. Construction: Veneer core.
4. Thickness: 7/16 inch.
5. Panel Size: 48 by 96 inches.
6. Glue Bond: Type II (interior).
7. Finish: Stain or clear finish in field.

2.3 COAT SHELVING AND CLOSET CLOTHES RODS

A. Shelving: 3/4-inch boards of same species and grade indicated above for interior lumber trim for opaque finish.

1. Shelf Cleats: 3/4-by-3-1/2-inch boards, of same species and grade indicated above for interior lumber trim for opaque finish.

B. Clothes Rods: 1-1/2-inch- diameter, clear, kiln-dried softwood rods; either Douglas fir or southern pine.

1. Rod Flanges: Stanly brass finished metal rod supports.

2.4 STAIR RAILINGS

A. Interior Railings: Clear, kiln-dried Fir yellow poplar of pattern indicated, solid laminated.

2.5 OPEN WALL SHELVING

A. Thermoset Decorative Overlay (melamine) shelves with 3 mm PVC edging, 3/4 inch thick unless noted otherwise.

B. Wall Brackets: Knape & Vogt No. E3200 WH, twin slotted standards with No. E3210 WH U-Brackets. Color as selected by Architect.

2.6 MANUFACTURED BASE AND WALL CABINETS

A. Product: Subject to compliance with requirements:
1. Fairlane Cherry Raised Panel Square as manufactured by Merillat.
2. Olympus Cherry Raised Panel Square as manufactured by Armstrong.

B. Colors, Textures, and Patterns: As selected by Architect from manufacturer's full range for these characteristics.

C. Exposed Cabinet Materials: Comply with the following:
1. Exposed Wood Species: As follows. Do not use two adjacent exposed faces that are noticeably dissimilar in color, grain, figure, or natural character markings.
   a. Hard cherry.
2. Solid Wood: Clear hardwood lumber of species indicated, free of defects, selected for compatible grain and color, and kiln dried to 7 percent moisture content.

D. Semiexposed Cabinet Materials: Unless otherwise indicated, provide the following:

1. Solid Wood: Sound hardwood lumber, selected to eliminate appearance defects and kiln dried to 7 percent moisture content. Stained to be compatible with exposed surfaces.
2. Plywood: Hardwood plywood complying with HPVA HP-1 with Grade C faces stained to be compatible with exposed surfaces.

E. Concealed Cabinet Materials: Comply with the following:
1. Solid Wood or Plywood: Any hardwood or softwood species, with no defects affecting strength or utility. Hardwood and softwood lumber kiln dried to 7 and 10 percent moisture content, respectively.
2. Particleboard: ANSI A208.1, Grade M-2.

F. Casework Hardware: Manufacturer's standard units complying with BHMA A156.9, of type, material, size, and finish as selected from manufacturer's standard choices. Provide for each drawer and door. Provide satin aluminum finished 1/4 round 3” long double posted back fastened pulls for each wall and base. Cabinet door and drawer.

G. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides; designed to prevent rebound when drawers are closed; with nylon-tired, ball-bearing rollers; and complying with BHMA A156.9, Type B05091.

H. Cabinet Construction: As follows:
1. Face Style: Reveal overlay; door and drawer faces partially cover cabinet body or face frames.
2. Face Frames: 3/4-by-1-5/8-inch solid wood.
3. Door and Drawer Fronts: Solid-wood stiles and rails, 5/8 inch thick, with 3/4-inch-thick, solid-wood center panels.

2.7 PLASTIC LAMINATE COUNTERTOPS AND PANELS

A. High pressure decorative laminate complying with NEMA LD3. Grade HGS.

2.8 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 into substrate, unless otherwise recommended by manufacturer:

1. Stainless steel.
2. Hot-dip galvanized steel.
3. Aluminum.
4. Prefinished aluminum in color to match stain, where face fastening of material to receive stain is unavoidable.

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. Paneling Adhesives: Comply with paneling manufacturer's written recommendations for adhesives.

1. Use adhesives that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

D. Glue: Aliphatic- or phenolic-resin wood glue recommended by manufacturer for general carpentry use.

1. Use wood glues that have a VOC content of 30 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

E. Sealants: Comply with requirements in Division 7 Section "Joint Sealants" for materials required for sealing siding work.

2.9 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. Back out or kerf backs of the following members, except members with ends exposed in finished work:

1. Exterior standing and running trim wider than 5 inches.
2. Interior standing and running trim, except shoe and crown molds.
3. Wood board paneling.

C. Ease edges of lumber less than 1 inch in nominal thickness to 1/16-inch radius and edges of lumber 1 inch or more in nominal thickness to 1/8-inch 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 for level and plumb. Install adjoining 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.
5. 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 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.
4. Fit exterior joints to exclude water. Apply flat grain lumber with bark side exposed to weather.

3.5 STAIR 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.

3.6 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 as recommended by panel manufacturer.
2. Conceal fasteners to greatest practical extent.
3. Arrange panels with grooves and joints over supports. Fasten to supports with nails of type and at spacing recommended by panel manufacturer. Use fasteners with prefinished heads matching groove color.

3.7 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.

3.8 CLEANING

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

END OF SECTION 06200