

SECTION 06200

FINISH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Exterior standing and running trim.
 2. Exterior siding.
 3. Interior standing and running trim.
 4. Plastic-laminate countertops.
 5. Solid-surfacing-material countertops.
 6. Wood ceilings.
 7. Wood flooring.
 8. Closet shelving.

1.2 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. Plastic laminates.
 2. Solid-surfacing materials.
 3. 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.
 4. 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.
- C. LEED Submittals:
1. Credit MR 2.1 and 2.2: Comply with Division 1 Section "Construction Waste Management."
 2. Product Data for Credit EQ 4.1: For adhesives and glues used at Project site, including printed statement of VOC content.
 3. Product Data for Credit EQ 4.4: For composite-wood products, documentation indicating that product contains no urea formaldehyde.
 4. Credit MR 5.1 and 5.2: Product Data indicating location of material manufacturer for regionally manufactured materials.
 - a. Include statement indicating cost and distance from manufacturer to Project for each regionally manufactured material.
 - b. Include statement indicating cost and distance from point of extraction, harvest, or recovery to Project for each raw material used in regionally manufactured materials.

5. Certificates for Credit MR 7: Chain-of-custody certificates certifying that products specified to be made from certified wood comply with forest certification requirements. Include evidence that mill is certified for chain of custody by an FSC-accredited certification body.
 - a. Include statement indicating costs for each certified wood product.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. General: Provide FSC Certified lumber of grades indicated according to the American Lumber Standards Committee National Grading Rule provisions of the grading agency indicated.
 1. Provide for both softwood and hardwood trim.
- B. 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.
- C. MDF: ANSI A208.2, Grade 130, made with binder containing no urea-formaldehyde resin.
- D. Particleboard: ANSI A208.1, Grade M-2 M-2, made with binder containing no urea-formaldehyde resin.
- E. Plastic Laminate: High-Pressure Decorative Laminate; NEMA LD 3, grades as indicated, or if not indicated, as required by woodwork quality standard.
 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering high-pressure decorative laminates that may be incorporated into the Work include, but are not limited to, the following:
 - a. Formica Corporation.
 - b. Lamin-Art.
 - c. Nevamar Decorative Surfaces.
 - d. Pionite Decorative Surfaces .
 - e. Wilsonart International; Div. of Premark International, Inc.
- F. Solid-Surfacing Material: Homogeneous solid sheets of filled plastic resin complying with material and performance requirements in ANSI Z124.3, for Type 5 or Type 6, without a precoated finish.
 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 2. Products: Subject to compliance with requirements, provide one of the following:
 - a. Corian; DuPont Polymers.
 - b. Surell; Formica Corporation.

2.2 EXTERIOR STANDING AND RUNNING TRIM

- A. Wood Trim for Timber Oil-Finished Applications: Kiln-dried lumber with surfaced (smooth) face and of the following species and grade:

1. Clear mahogany.

2.3 EXTERIOR SOFFITS

- A. Bead Board: 1/2 by 4 inch fir with double bead.

2.4 EXTERIOR SIDING

- A. Plywood Panels: Marine grade mahogany plywood.
 1. Face Veneer Species: AB, Plain sliced Mahogany.
 2. Number of Plys: 7.
 3. Thickness: 3/8 inch.

2.5 INTERIOR STANDING AND RUNNING TRIM

- A. Hardwood Trim for Transparent Finish (Stain or Clear Finish): Clear, kiln-dried, white oak finished lumber (S4S), selected for compatible grain and color.
- B. 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; NELMA or NLGA.

2.6 PANELING

- A. Hardwood Veneer MDF Paneling: Manufacturer's hardwood veneer-faced MDF panels complying with the following:
 1. Face Veneer Species: Quarter sliced white oak.
 2. Match between Veneer Leaves: Book match.
 3. Backing: Formaldehyde-free DDF core.
 4. Thickness: 3/4 inch.
 5. Product: Medite II or Arreis by SierraPine.
- B. Pegboard: Masonite perforated hardboard paneling, matte white undercoat finish, 1/4-inch thickness.

2.7 PLASTIC-LAMINATE COUNTERTOPS

- A. Quality Standard: Comply with AWI Section 400 requirements for high-pressure decorative laminate countertops.
- B. Grade: Premium.
- C. High-Pressure Decorative Laminate Grade: HGS, nominal thickness .048" (1.2 mm).
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
 1. Provide Architect's selections from manufacturer's full range of colors and finishes in the following categories:

- a. Solid colors.
 - b. Patterns.
- E. Grain Direction: Parallel to cabinet fronts.
- F. Edge Treatment: As indicated.
- G. Core Material: Formaldehyde-free MDF.

2.8 SOLID-SURFACING-MATERIAL COUNTERTOPS

- A. Quality Standard: Comply with AWI Section 400 requirements for countertops.
- B. Grade: Premium.
- C. Solid-Surfacing-Material Thickness: 3/4 inch (19 mm).
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors of solid-surfacing material complying with the following requirements:
- 1. Provide Architect's selections from manufacturer's full range of colors and finishes.
- E. Fabricate tops in one piece with shop-applied backsplashes and edges, unless otherwise indicated. Comply with solid-surfacing-material manufacturer's written recommendations for adhesives, sealers, fabrication, and finishing.

2.9 WOOD FLOORING

- A. Flooring system will consist of Masonite hardboard panels over Homasote substrate, over OSB floor sheathing.
- B. Sheathing: DOC PS 2, OSB with fully sanded face.
- 1. Product: Advantech Blue by Huber Engineered Woods.
- C. Homasote Substrate: Provide 1 inch thick 440 Sound Barrier by Homasote Company.
- D. Masonite Floor Panels: Provide 1/4 inch thick hardboard complying with AHA A135.4.

2.10 CLOSET SHELVING

- A. Provide 42 inch long rubber-coated wire shelves with heavy-duty shelf supports.
- B. Provide 6 shelves in each of storage closets G01A and G01G.

2.11 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.
 - 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.
- D. Glue: Aliphatic- or phenolic-resin wood glue recommended by manufacturer for general carpentry use.
- E. Flashing: Comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim" for flashing materials installed in finish carpentry.
1. Horizontal Joint Flashing for Siding: Preformed prefinished aluminum Z-shaped flashing.
- F. Sealants: Comply with requirements in Division 7 Section "Joint Sealants" for materials required for sealing siding work.

2.12 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 (125 mm).
 2. Interior standing and running trim, except shoe and crown molds.
- C. 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.
- C. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
 - 1. Align adjacent solid-surfacing-material countertops and form seams to comply with manufacturer's written recommendations using adhesive in color to match countertop. Carefully dress joints smooth, remove surface scratches, and clean entire surface.
 - 2. Install countertops with no more than 1/8 inch in 96-inch (3 mm in 2400-mm) sag, bow, or other variation from a straight line.
 - 3. Secure backsplashes to tops.
 - 4. Calk space between backsplash and wall with sealant specified in Division 7 Section "Joint Sealants."

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.

4. Fit exterior joints to exclude water. Apply flat grain lumber with bark side exposed to weather.

3.5 PANELING INSTALLATION

- A. Wood Veneer Paneling: Select and arrange panels on each wall to minimize noticeable variations in grain character and color between adjacent panels. Leave 1/4-inch (6-mm) 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.

3.6 WOOD FLOORING

- A. Fasten wood sheathing to substrate. Fasten Homasote sheet enough to hold in place. Fasten Masonite hardboard panels through Homasote into sleeper framing. Space hardboard, homasote and sheathing with 1/8 inch joints.

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