## SECTION 06 41 00

## ARCHITECTURAL WOOD CASEWORK

## PART 1 GENERAL

#### **1.01 SECTION INCLUDES**

- A. Architectural cabinets.
- B. Cabinet hardware and accessories.

#### 1.02 RELATED REQUIREMENTS

- A. Section 06 10 00 Rough Carpentry: Support framing, grounds, and concealed blocking.
- B. Section 12 36 00 Countertops.

## 1.03 REFERENCE STANDARDS

- A. ANSI A208.2 Medium Density Fiberboard (MDF) for Interior Applications; 2016.
- B. ASTM D1037 Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials; 2012 (Reapproved 2020).
- C. BHMA A156.9 American National Standard for Cabinet Hardware; 2015.
- D. HPVA HP-1 American National Standard for Hardwood and Decorative Plywood; 2016.
- E. NEMA LD 3 High-Pressure Decorative Laminates; 2005.
- F. PS 1 Structural Plywood; 2009 (Revised 2019).

#### 1.04 SUBMITTALS

- A. See Section 01 30 00 Administrative Requirements for submittal procedures.
- B. Shop Drawings: Include plans, elevations, sections, and attachment details; indicate materials, component profiles, fastening methods, jointing details, and accessories.
- C. Product Data: Provide data for hardware accessories.
- D. Samples for Selection: Owner to make selections.
  - 1. Plastic Laminates: Submit chain set of samples for manufacturer's standard offering.
  - 2. Thermally Fused Laminate and Liner Panels: Submit one sample for each type, color, pattern, and surface finish required in manufacturer's standard size.
  - 3. Exposed Cabinet Hardware and Accessories: Submit one full-size unit for each type and finish demonstrating hardware design, quality, and finish.

# 1.05 QUALITY ASSURANCE

- A. Perform work in accordance with AWI/AWMAC/WI (AWS) Architectural Woodwork Standards for grades of interior architectural woodwork, construction, finishes, and other requirements.
  - 1. Comply with requirement for Premium Grade.

## 1.06 DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

## 1.07 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

#### PART 2 PRODUCTS

## 2.01 MANUFACTURED CASEWORK

A. Contractor, at its option, may provide manufactured modular laminate clad casework in lieu of custom casework, subject to specified quality standard.

## 2.02 CABINETS

A. Quality Standard: Premium Grade, in accordance with AWI/AWMAC/WI (AWS), unless noted otherwise.

- 1. Unless otherwise indicated, comply with the Architectural Woodwork Standards for grade of interior architectural woodwork indicated for construction, finishes, installation, and other requirements.
- B. Cabinets:
  - 1. Finish Exposed Exterior Surfaces: Decorative laminate.
  - 2. Finish Semi-Exposed Surfaces: Decorative laminate
  - 3. Finish Concealed Surfaces: Manufacturer's option.
  - 4. Door and Drawer Front Edge Profiles: Square edge with applied PVC edge banding, 1/8-inch (3.0mm).
  - 5. Casework Construction Type: Type A Frameless.
  - 6. Interface Style for Cabinet and Door: Style 1 Overlay; flush overlay.
  - 7. Layout for Cabinet and Door Fronts: Flush panel.
  - 8. Adjustable Shelf Loading: 100 psf.
  - 9. Cabinet Style: Flush overlay.
  - 10. Cabinet Doors and Drawer Fronts: Flush style.
  - 11. Drawer Construction Technique: As recommended by fabricator.

## 2.03 WOOD MATERIALS - GENERAL

- A. Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of architectural cabinet and quality grade specified unless otherwise indicated.
  - 1. Wood Moisture Content: 5 to 10 percent.
- B. Moisture Resistant Cabinet Base: Fabricated from material tested in accordance with ASTM D1037 with a thickness swell factor of 5 percent or less.
- C. Provide wood products with no urea-formaldehyde.
- D. Wood fabricated from old growth timber is not permitted.

## 2.04 LUMBER MATERIALS

A. Hardwood Lumber: National Hardwood Lumber Association (NHLA); premium grade; species as recommended by manufacturer.

## 2.05 PANEL MATERIALS

- A. Veneer-Faced Panel Products (Hardwood Plywood): HPVA HP-1; Graded in accordance with AWI/AWMAC Architectural Woodwork Quality Standards; 7-ply core of veneer with Type II water resistant glue; thickness as required.
- B. Medium-Density Fiberboard (MDF): ANSI A208.2, as specified in AWI/AWMAC Architectural Woodwork Quality Standards; composed of wood fibers pressure bonded with Type II moisture resistant adhesive to suit application; sanded faces; thickness as required.
  - 1. Use for painted components, concealed components, and as indicated on the drawings.
- C. Softwood Plywood: Exterior softwood plywood complying with DOC PS 1.

## 2.06 PRESERVATIVE-TREATED-WOOD MATERIALS

- A. Preservative-Treated-Wood Materials: Provide with water-repellent preservative treatment complying with AWPA N1.
  - 1. Application: Provide where interior architectural woodwork is in contact with concrete or masonry, and where indicated on drawings.
  - 2. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
    - a. Mark lumber with treatment quality mark of an inspection agency approved by the American Lumber Standards Committee's (ALSC) Board of Review.

## 2.07 LAMINATE MATERIALS

A. Thermally Fused Laminate (TFL): Melamine resin, NEMA LD 3, Type VGL laminate panels.

- B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications and as indicated on drawings.
- C. Provide specific types as follows:
  - 1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness.
  - 2. Vertical Surfaces: VGS, 0.028 inch nominal thickness.
  - 3. Cabinet Liner: CLS, 0.020 inch nominal thickness.
  - 4. Laminate Backer: BKL, 0.020 inch nominal thickness, undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.
- D. Finish and Color: As indicated on drawings.

## 2.08 COUNTERTOPS

A. Countertops: See Section 12 36 00.

## 2.09 ACCESSORIES

- A. Adhesive: Type recommended by AWI/AWMAC to suit application.
- B. Plastic Edge Banding: Extruded PVC, flat shaped; smooth finish; self locking serrated tongue; of width to match component thickness.
  - 1. Thickness: 3mm.
  - 2. Color: Matching adjacent laminate.
- C. Fasteners: Size and type to suit application.
- D. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel or chrome-plated finish in exposed locations.
- E. Concealed Joint Fasteners: Threaded steel.
- F. Grommets for Cable Passage: Plastic grommet and matching plastic caps with slot for wire passage; color as indicated on drawings.

## 2.10 HARDWARE

- A. Hardware: BHMA A156.9, types as recommended by fabricator for quality grade specified.
- B. Adjustable Shelf Standards and Supports: Standard side-mounted system using recessed metal shelf standards and coordinated self rests, satin chrome finish, for nominal 1 inch spacing adjustments.
- C. Work Surface Brackets: Fixed, L-shaped, face-of-wall mounting.
  - 1. Materials: Steel.
  - 2. Finish: Manufacturer's standard, factory-applied, primer.
  - 3. Load Capacity: 500 kg (1,100 pounds) per pair.
  - 4. Products:
    - a. Hafele; Hebgo Bracket 287.45: www.hafele.com.
    - b. Substitutions: See Section 01 60 00 Product Requirements.
- D. Drawer and Door Pulls: Back mounted, solid metal, 4 inch centers (unless noted otherwise).
- E. Keyed Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.
- F. Drawer Slides:
  - 1. Type: Full extension.
  - 2. Static Load Capacity: Heavy Duty grade; 150 pound rating minimum.
  - 3. Mounting: Side mounted.
  - 4. Stops: Integral type.
  - 5. Features: Soft-close; self closing/stay closed.
  - 6. Products:
    - a. Accuride International, Inc; 3634 EC Easy-Close Heavy-Duty Slides: www.accuride.com.

- b. Knape & Vogt Manufacturing Company; Heavy-Duty Drawer Slides 8650FM: www.knapeandvogt.com.
- c. Substitutions: See Section 01 60 00 Product Requirements.
- G. Hinges: European style concealed self-closing type, soft-close, steel with polished finish.1. Products:
  - a. Blum, Inc; COMPACT BLUMOTION: www.blum.com.
  - b. Substitutions: See Section 01 60 00 Product Requirements.

## 2.11 FABRICATION

- A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.
- B. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
- C. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
- E. Mechanically fasten back splash to countertops as recommended by laminate manufacturer at 16 inches on center.
- F. Provide cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

# PART 3 EXECUTION

## 3.01 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.

## 3.02 INSTALLATION

- A. Install work in accordance with AWI/AWMAC/WI (AWS) requirements for grade indicated.
- B. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.
- C. Use fixture attachments in concealed locations for wall mounted components.
- D. Use concealed joint fasteners to align and secure adjoining cabinet units.
- E. Secure cabinets to floor using appropriate angles and anchorages.
- F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

## 3.03 ADJUSTING

A. Adjust installed work.

# 3.04 CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

# END OF SECTION