

SECTION 06 41 00 - ARCHITECTURAL WOOD CASEWORK

PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Specially fabricated cabinet units.
- B. Cabinet hardware.
- C. Factory finishing.

1.2 RELATED REQUIREMENTS

- A. Division 1: Administrative, procedural, and temporary work requirements.
- B. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- C. Section 07 90 05 - Joint Sealers.
- D. Section 12 36 00 - Countertops.
- E. Section 08 80 00 - Glazing: Glass for casework.
- F. Section 12 35 53.19 - Wood Laboratory Casework.

1.3 DEFINITIONS

- A. Exposed Portions of Casework: Include surfaces visible when doors and drawers are closed. Bottoms of cases more than 4'-0" above floor shall be considered as exposed. Visible members in open cases or behind full glass doors shall be considered as exposed portions.
- B. Semi-Exposed Portions of Casework: Include those members behind opaque doors or framed glass doors, such as shelves, dividers, interior face of ends, case back, drawer sides, backs and bottoms, and back face of doors.
- C. Concealed Portions of Casework: Include sleepers, dust panels, and other surfaces not usually visible after installation. Tops of cases 6'-6" or more above floor shall be considered concealed.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Pre-installation Meeting: Convene a pre-installation meeting not less than one week before starting work of this section; require attendance by all affected installers.
 - 1. Convene prior to ordering locks for cabinets.
 - 2. Review, discuss, and finalize Owner's keying requirements.

1.5 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
 - 1. Minimum Scale of Detail Drawings: 3" to 1'.
 - 2. Provide the information required by AWI/AWMAC/WI Architectural Woodwork Standards.
- C. Product Data: Provide data for hardware accessories and wood veneers.

D. Samples:

1. Plastic laminate samples in each selected color and finish.
 - a. Following approval of laminate, submit 6" x 6" casework door sample showing edges, core, and specified laminate finish applied.
2. Finish hardware.
3. Wood veneer: 12" square sample of specified veneer.
 - a. Following approval of veneer, submit 6" x 6" casework door sample showing edges, core, and specified veneer with finish applied.

1.6 QUALITY ASSURANCE

- A. Fabricator/Installer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 5 years of documented experience.
- B. Manufacturer Qualifications: Member in good standing of the Architectural Woodwork Institute (AWI) and familiar with the AWI/AWMAC QSI.
- C. Quality Certification: Provide inspection and quality certification of completed custom cabinets in accordance with AWI/AWMAC Quality Certification Program.
- D. Single Source Responsibility: Obtain architectural woodwork from single source to ensure uniformity in quality, appearance and construction.
 1. Fabricator is responsible for finishing and installation of woodwork.

1.7 MOCK-UP

- A. Provide mock-up of typical base cabinet and wall cabinet, including hardware, and finishes.
- B. Locate where directed.
- C. Approved mock-up may remain as part of the Work.

0.1 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing work of this section, conduct pre-installation conference under provisions of Section 01 32 00.
- B. Agenda: Discuss and agree upon acceptable delivery, storage, and handling, preparatory work, and methods of installation, environmental conditions and controls required to maintain temperature and humidity conditions in areas to receive woodwork.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.

1.10 FIELD CONDITIONS

- A. Ensure HVAC system is complete and operational for minimum 7 days prior to installation of casework.
- B. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

- C. Field Measurements: Field measure conditions where woodwork is indicated to be fitted to other construction prior to fabricating work of this Section.
 - 1. Show final field measurements on shop drawings.
 - 2. Where field measurements cannot be made, without delaying the Project, coordinate dimensions among trades to ensure proper fit of woodwork.

0.11 WARRANTY

- A. Special Warranty: Prepare and submit in accordance with Section 01 70 00.
 - 1. Warranty with provisions for repairing or replacing, at no additional cost to Owner, architectural woodwork items that exhibit defects in material or workmanship for two years.

PART 2: PRODUCTS

0.1 MANUFACTURERS

- A. Acceptable Architectural Woodwork Manufacturers:
- B. Haldeman Homme, Dallas, TX.
- C. Khoury, Waco, TX.
- D. Medco Millwork, Dallas, TX.
- E. Robert Shaw, Fort Worth, TX.
- F. Substitutions: Under provisions of Section 01 60 00.

2.2 APPLICATIONS

- A. See Section 09 06 00 for color and finish information for:
 - 1. Plastic laminate (PL*).
 - 2. Wood (WD).
- B. See Section 12 35 53.19 for wood laboratory casework.

0.2 MATERIALS

- A. General: Provide materials that comply with requirements of AWI Architectural Woodwork Quality Standards for each type woodwork and quality grade indicated.
 - 1. Products surfaced four sides, unless noted otherwise.
- B. Lumber:
 - 1. Interior Trim, Softwood Lumber: PS 20.
 - 2. Interior Trim, Hardwood Lumber: FS MM-L-736C.
- C. Medium Density Fiberboard: ANSI A208.2, Classification M-3.
 - 1. Thickness:
 - a. Panel structural components: Minimum 3/4" thick.
 - b. Back Panels, Drawer Components, and Drawer Bottoms: Minimum 1/2" thick.
 - c. Fixed Shelves, Dividers, and Mounting Stretchers: Minimum 3/4" thick.

- d. Semi-exposed Adjustable Shelves in Cabinets under 32" Wide: Minimum ¾" thick.
 - e. Shelves in Open Cabinets and Shelves in Cabinets 32" Wide or Greater: Not allowed.
- D. Paint Grade Plywood: Hardwood plywood meeting HUD-regulated emission limits.
 - 1. Quality Standard: PS 51.
 - 2. Core Material: Particleboard.
 - 3. Face Veneer: Rotary-cut white birch.
 - 4. Quality Standard: PS-1.
 - 5. Core Material: Fir veneer.
 - 3. Face Veneer: Medium density overlay (MDO).
- 2.3 CABINETS
 - A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI Architectural Woodwork Standards for Grades as indicated.
 - B. Wood Veneer Faced Cabinets: Premium grade; species and cut to be selected.
 - 1. Exposed Surfaces: Grade AA, Select White Maple, plain sliced, slip-matched.
 - 2. Semi-Exposed Surfaces: Grade A, Select White Maple, plain sliced, slip-matched.
 - 3. Concealed Surfaces: Grade B, Maple, rotary cut, random-matched.
 - C. Plastic Laminate Faced Cabinets: Custom grade.
- 2.4 WOOD-BASED COMPONENTS
 - A. Hardwood Edge banding: Use solid hardwood edge banding matching species, color, grain, and grade for exposed portions of cabinetry.
- 2.5 LAMINATE MATERIALS
 - A. Manufacturers: As scheduled.
 - 1. Substitutions: See Section 01 60 00 - Product Requirements.
 - B. Provide specific types as scheduled.
 - 1. Horizontal Surfaces (Excluding Countertops): HGS, 0.048" nominal thickness, colors as scheduled, finish as scheduled.
 - 2. Vertical Surfaces: VGS, 0.028" nominal thickness, colors as scheduled, finish as scheduled.
 - 3. Post-Formed Horizontal Surfaces: HGP, 0.039" nominal thickness, through color, colors as scheduled, and finish as scheduled.
 - 4. Post-Formed Vertical Surfaces: VGP, 0.028" nominal thickness, through color, colors as scheduled, and finish as scheduled.
 - 5. Cabinet Liner: Almond color melamine, thermo-fused to particle board core. Melamine shall meet or exceed NEMA LD 3 for GP and CL standards.
 - 6. Laminate Backer: BKL, 0.020" nominal thickness, undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.
- 2.6 COUNTERTOPS - See Section 12 36 00
- 2.7 ACCESSORIES

- A. Adhesive: Type recommended by AWI/AWMAC to suit application.
- B. Glass: Type as specified in Section 08 80 00.
- 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. Panel Hooks at Knee Space Removable Panels: Bright zinc plated steel hooks; 11/32" diameter, 3½" long. Product: "Model #4120" as manufactured by Stanley or accepted substitute.
- F. Grommets: Plastic material for cut-outs. Provide in the following locations:
 - 1. Countertops over knee spaces that have power and/or data outlets located below countertop level.
 - 2. Other locations indicated.
- G. Sealant: Specified in Section 07 90 05.

2.8 HARDWARE

- A. Adjustable Shelf Supports: Standard side-mounted system using multiple holes for pin supports and coordinated shelf rests, satin chrome finish, for nominal 1" spacing adjustments.
- B. Adjustable Shelf Supports: Standard back-mounted system using recessed metal shelf standards and coordinated cantilevered shelf brackets, satin chrome finish, for nominal 1" spacing adjustments.
- C. Drawer and Door Pulls: "U" shaped wire pull, aluminum with satin finish, 4" centers.
- D. Cabinet Locks: Keyed cylinder, master keyed, steel with satin finish.
 - 1. Manufacturer: CCL Security Products Co., or accepted substitute.
 - 2. ¾" thick doors: No. 0737 locks with No. 2540 strike.
 - 3. ¾" thick drawers: No. 0738 locks with No. 2540 strike.
 - 4. 1¾" thick doors: ANSI 156.13, Grade 1 mortise with lever handles, function F17.
 - 5. Provide locks for cabinet doors and drawers indicated on drawings.
 - 6. Keying:
 - a. Number of keys required for each lock: 4.
 - b. Key locks in accordance with Owner-approved keying schedule.
 - c. Stamp locks faces and keys in accordance with Owner-approved keying schedule.
- E. Drawer Slides:
 - 1. Type: ¾ Extensions.
 - 2. Static Load Capacity: Commercial grade.
 - 3. Mounting: Side mounted.
 - 4. Stops: Positive type.
 - 5. Manufacturers:
 - a. Knape & Vogt Manufacturing Company; Product "1300 Lever Release - ¾ Extension": www.knapeandvogt.com.
 - b. Substitutions: See Section 01 60 00 - Product Requirements.
- F. Hinges for ¾" Thick Doors: European style concealed self-closing type, minimum 110° swing, steel with polished finish.

1. Manufacturers:
 - a. Grass America Inc.: Product "G300 Series": www.grassusa.com.
 - b. Substitutions: See Section 01 60 00 - Product Requirements.
- G. Hinges For 1 $\frac{3}{8}$ " Thick Doors: Wardrobe type, 26D - satin chromium plated finish.
 1. Manufacturers:
 - a. Stanley Hardware; Product "#350043 - 1 $\frac{3}{8}$ " - 1 $\frac{3}{4}$ " Satin Chromium Plated (26D) Extra Heavy Pivot".
 - b. Substitutions: See Section 01 60 00 - Product Requirements.
- H. Sliding Door Track Assemblies: Upper and lower track of satin anodized aluminum, with matching shoe equipped with nylon rollers. Provide miscellaneous parts and pieces needed for completed installed system, including manufacturer's standard t-bolt plunger lock.
 1. Product: "Model 630019 - 2 Door Security Style Wardrobe Doors" manufactured by Stylmark Glass and Glazing Products or approved substitution: www.stylmark.com.

2.9 FABRICATION

- A. Cabinet Style: As indicated for each location.
- B. Cabinet Doors and Drawer Fronts: As indicated.
 1. Cabinet Doors Up to 6' High: $\frac{3}{4}$ " thick panel product with scheduled finish, unless noted otherwise.
 2. Cabinet Doors Over 6 Feet High: 1 $\frac{3}{8}$ " thick Solid core, non-rated: Type PC-5 or PC-7, Particleboard Core with stiles and rails bonded to core. Comply with AWI Section 1300; Custom Grade. Face veneers same as custom cabinets.
- C. Drawer Construction Technique: As recommended by fabricator.
- D. Assembly: Shop assembles cabinets for delivery to site in units easily handled and to permit passage through building openings.
 1. Use plastic insertion dowels and 5mm "Euroscrews" to attach hinges to doors and cabinets in accordance with AWI Section 400.
- E. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.
- F. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.
- G. 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' from sink cut-outs.
 1. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
 2. Cap exposed plastic laminate finish edges with material of same finish and pattern.
- H. Matching Wood Grain: Comply with requirements of quality standard for specified Grade exclusively.
- I. Mechanically fasten back splash to countertops with steel brackets at 16" on center.

- J. Provide cutouts for plumbing fixtures, inserts, outlet boxes, and fixtures and fittings. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.
- K. Shop glaze glass materials using framing manufacturer's recommended glazing method.

2.10 FACTORY FINISHING

- A. Sand work smooth and set exposed nails and screws.
- B. For opaque finishes, apply wood filler in exposed nail and screw indentations and sand smooth.
- C. On items to receive transparent finishes, use wax or burn-in filler which matches surrounding color and sheen.
- D. Finish work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5 - Finishing for Grade specified and as follows:
 - 1. Transparent:
 - a. System - 5, Varnish, Conversion.
 - b. Stain: As scheduled.
 - c. Sheen: Satin.

PART 3: EXECUTION

3.1 EXAMINATION

- A. Verify adequacy of backing and support framing. Concealed wood blocking specified in Section 06 10 00.
- B. Verify location and sizes of utility rough-in associated with work of this section.

3.2 INSTALLATION

- A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.
- B. Use fixture attachments in concealed locations for wall mounted components.
- C. Use concealed joint fasteners to align and secure adjoining cabinet units and countertops.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32". Do not use additional overlay trim for this purpose.
- E. Secure cabinets and counter bases 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.

3.3 ADJUSTING

- A. Test installed work for rigidity and ability to support loads.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.4 CLEANING

- A. Clean casework, counters, shelves, hardware, fittings, and fixtures.
- B. Waste Management: Comply with requirements of Section 01 74 19 for removal and disposal of construction debris and waste.

END OF SECTIONS 06 41 00