

SECTION 06410

ARCHITECTURAL WOOD CASEWORK

1 PART 1 GENERAL

1.1 SUMMARY

- A. Section includes custom-fabricated cabinet units; counter tops; cabinet hardware; preparation for installing utilities in cabinets; and [shop] [site] finishing.
- B. Related Sections:
 - 1. Section 06100 - Rough Carpentry: Grounds and support framing.
 - 2. Section 06200 - Finish Carpentry: Related trim not specified in this section.
 - 3. Section 09900 - Painting
 - 4. Section 12353 – Pre-Manufactured Casework.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A156.9 - Cabinet Hardware.
 - 2. ANSI A208.1 - Mat-Formed Wood Particleboard.
- B. Architectural Woodwork Institute:
 - 1. AWI - Quality Standards Illustrated.
- C. ASTM International:
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- D. Federal Specification Unit:
 - 1. FS A-A-1936 - Adhesive, Contact, Neoprene Rubber.
- E. Hardwood Plywood and Veneer Association:
 - 1. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood.
- F. National Electrical Manufacturers Association:
 - 1. NEMA LD 3 - High Pressure Decorative Laminates.
- G. National Fire Protection Association:
 - 1. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.

- H. Woodwork Institute:
 - 1. WI - Manual of Millwork.

1.3 SUBMITTALS

- A. Section 01340 – Shop Drawings, Product Data and Samples: Submittal procedures.
- B. Shop Drawings: Indicate materials, component profiles and elevations, assembly methods, joint details, fastening methods, accessory listings, hardware location and schedule of finishes.
- C. Product Data: Submit data for hardware accessories.
- D. Samples:
 - 1. Submit (1) 6 x 6 inch size sample, illustrating cabinet finish.
 - 2. Submit (1) 4x6 inch size samples, illustrating counter top finish.
 - 3. Submit (1) sample of drawer pulls illustrating hardware finish.
- E. Certification: Submit copy of fabricator's authorization to use AWI Grade Stamps.

1.4 QUALITY ASSURANCE

- A. Perform work in accordance with AWI (Architectural Woodwork Institute) Architectural Woodwork Quality Standards Illustrated, Premium Grade.
- B. Surface Burning Characteristics: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.5 QUALIFICATIONS

- A. Fabricator: Company specializing in performing Work of this section with minimum three years experience.

1.6 PRE-INSTALLATION MEETINGS

- A. Convene minimum one week prior to commencing work of this section.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 01640 - Product Handling: Product storage and handling requirements.
- B. Protect units from moisture damage.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Section 01640 - Product Handling.
- B. During and after installation of Work of this section, maintain same temperature and humidity conditions in building spaces as will occur after occupancy.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

2 PART 2 PRODUCTS

2.1 COMPONENTS

- A. Hardwood Lumber: AWI Grade I. Maximum moisture content of 6-8 percent; and the following:
 - 1. Species of Wood: Birch
- B. Hardwood Plywood: AWI Grade AA veneer. HPVA HP-1 with particleboard medium density fiberboard veneer core; type of glue recommended for application; and the following:
 - 1. Species of Veneer: Birch
 - 2. Cut or Slicing of Veneer: Rotary
 - 3. Matching of Individual Leaves to Each Other: book matching.
 - 4. Matching Across the Panel Face: balanced matching.
- C. Wood Particleboard: ANSI A208.1 Type 1; composed of wood chips or sawdust, medium density, made with water resistant adhesive; sanded faces.
 - 1. Interior Composite Wood and Agrifiber Products: Contain no added urea-formaldehyde resins.
- D. High Pressure Decorative Laminate: NEMA LD 3, GP50 for horizontal surfaces, GP28 for vertical surfaces, CL20 for cabinet liner surfaces, BK20 for undecorated backing sheets, PF42 for post forming, FR50 for fire-retardant surfaces Color, texture and finish as indicated on interior finish legend.
- E. Synthetic Surfacing: Synthetic marble of polyester resins, with integral color and design, stain resistant to domestic chemicals and cleaners. Specified in Section 06616.

2.2 ACCESSORIES

- A. Adhesive for High Pressure Decorative Laminates: Type recommended by laminate manufacturer to suit application.
- B. Veneer Edge Band: Standard wood veneer edge band matching face veneer.
- C. Plastic Edge Trim: Extruded shapes; smooth finish; self locking serrated tongue; of width to match component thickness; color as selected from manufacturers complete color line.
- D. Fasteners and Anchors:
 - 1. Fasteners: [Hot dipped] [Electro] galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
 - 2. Nails and Staples: ASTM F1667.
 - 3. All exposed fasteners shall be tamper proof.

- E. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application. Concealed Joint Fasteners: Threaded steel.
- F. Grommets: Plastic material for cut-outs.
- G. Hardware: BHMA A156.9,
- H. Drawer and Door Pulls: "U" shaped pull, steel with satin finish 4 inch centers.
- I. Cabinet Locks: Keyed cylinder, two keys for each lock, master keyed, steel with satin finish.
- J. Drawer Slides: Galvanized steel construction, ball bearings separating tracks, full extension type.
- K. Hinges: Butt, steel with satin finish.

2.3 FABRICATION

- A. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
- B. Fit shelves, doors, and exposed edges with matching veneer edging. Use one piece for full length only.
- C. Cap exposed high pressure decorative laminate finish edges with material of same finish and pattern.
- D. Door and Drawer Fronts: 3/4 inch thick; overlay style.
- E. When necessary to cut and fit on site, fabricate materials with ample allowance for cutting. Furnish trim for scribing and site cutting.
- F. Apply high pressure decorative laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners.
- G. Apply wood laminate by grain matching adjacent sheets to book matching.
- H. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
- I. Mechanically fasten back splash to counter tops with steel brackets at 16 inches on center.
- J. Fabricate cabinets and counter tops with cutouts for plumbing fixtures. Verify locations of cutouts from on-site dimensions.

2.4 SHOP FINISHING

- A. Sand work smooth and set exposed nails and screws.
- B. Apply wood filler in exposed nail and screw indentations.
- C. On items to receive transparent finishes, use wood filler matching surrounding surfaces and of types recommended for applied finishes.

- D. Finish work in accordance with AWI - Section 1500 Factory Finishing; Premium Quality; Clear Transparent Type:
 - 1. Nitrocellulose Lacquer.
 - 2. Precatalyzed Lacquer.
 - 3. Postcatalyzed Lacquer.
 - 4. CAB & Water Acrylic Lacquer.
 - 5. Conversion Varnish.
 - 6. Synthetic Penetrating and Simulated Oil.
 - 7. Catalyzed Vinyl.
 - 8. Catalyzed Polyurethane.
 - 9. Polyester.
 - 10. UV Cured Epoxy, Polyester, Urethane.
- E. Seal and varnish exposed to view surfaces. Brush apply only.
- F. Seal and varnish internal exposed to view and semi-concealed surfaces.
- G. Finish in accordance with Section 09900.

2.5 SOURCE QUALITY CONTROL AND TESTS

- A. When fabricator is approved by authority having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
 - 1. Specified shop tests are not required for Work performed by approved fabricator.

3 PART 3 EXECUTION

3.1 EXAMINATION

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

3.2 INSTALLATION

- A. Set and secure casework in place; 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 counter tops.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- E. Secure cabinet 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. Section 01700 – Contract Closeout: Testing, adjusting and balancing.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.4 CLEANING

- A. Section 01700 – Contract Closeout: Final cleaning.
- B. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION