

SECTION 06 41 00
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Specially fabricated cabinet units.
- B. Countertops.
- C. Hardware.
- D. Factory finishing.
- E. Preparation for installing utilities.

1.02 RELATED REQUIREMENTS

- A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 06 10 00 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- C. Section 06 61 00 - Cast Polymer Fabrications: Cast plastic countertops.
- D. Section 08 80 00 - Glazing: Glass for casework.
- E. Section 09 91 23 - Interior Painting: Field finishing of cabinet exterior.
- F. Section 09 93 00 - Staining and Transparent Finishing: Field finishing of cabinet exterior.
- G. Section 12 36 00 - Countertops.

1.03 REFERENCE STANDARDS

- A. ANSI A135.4 - Basic Hardboard; 2012 (Reaffirmed 2020).
- B. ANSI A208.1 - American National Standard for Particleboard; 2022.
- C. ANSI A208.2 - Medium Density Fiberboard (MDF) for Interior Applications; 2022.
- D. AWI (QCP) - Quality Certification Program; Current Edition.
- E. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards, 2nd Edition; 2014, with Errata (2016).
- F. AWMAC (GIS) - Guarantee and Inspection Services Program; Current Edition.
- G. AWMAC/WI (NAAWS) - North American Architectural Woodwork Standards; 2021, with Errata.
- H. BHMA A156.9 - Cabinet Hardware; 2020.
- I. GSA CID A-A-1936 - Adhesives, Contact, Neoprene Rubber; 1996a (Validated 2013).
- J. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood; 2024.
- K. ISO 4586-2 - High-Pressure Decorative Laminates (HPL, HPDL) – Sheets Based on Thermosetting Resins (Usually Called Laminates) – Part 2: Determination of Properties; 2018.
- L. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.
- M. UL (DIR) - Online Certifications Directory; Current Edition.
- N. WI (CCP) - Certified Compliance Program (CCP); Current Edition.
- O. WI (CSIP) - Certified Seismic Installation Program (CSIP); Current Edition.
- P. WI (MCP) - Monitored Compliance Program (MCP); Current Edition.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene a preinstallation meeting not less than one week before starting work of this section; require attendance by all affected installers.

1.05 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. Scale of Drawings: 1-1/2 inch to 1 foot, minimum.
 - 2. Provide information as required by AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS).
 - 3. Include certification program label.
- C. Product Data: Provide data for hardware accessories.
- D. Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches square, illustrating proposed cabinet, countertop, and shelf unit substrate and finish.
- E. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.
- F. Certificate: Submit labels and certificates required by quality assurance and quality control programs.
- G. Sustainable Design Submittal: Documentation for sustainably harvested wood-based components.

1.06 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.
 - 1. Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.
 - 2. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.
 - 3. Single Source Responsibility: Provide and install this work from single fabricator.
- B. Quality Certification:
 - 1. Comply with AWI (QCP) woodwork association quality certification service/program in accordance with requirements for work specified in this section: www.awiqcp.org/#sle.
 - a. This AWI (QCP) project is registered as project number _____.
 - 2. Comply with AWMAC (GIS) woodwork association quality certification service/program in accordance with requirements for work specified in this section: www.awmac.com/#sle.
 - 3. Comply with WI (CCP) woodwork association quality certification service/program in accordance with requirements for work specified in this section: <https://woodworkinstitute.com/#sle>.
 - 4. Provide labels or certificates indicating that the installed work complies with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS) requirements for grade or grades specified.
 - 5. Provide designated labels on shop drawings as required by certification program.
 - 6. Provide designated labels on installed products as required by certification program.
 - 7. Submit certifications upon completion of installation that verifies this work is in compliance with specified requirements.
 - 8. Replace, repair, or rework all work for which certification is refused.

1.07 MOCK-UPS

- A. Provide mock-up of typical base cabinet, wall cabinet, and countertop, including hardware, finishes, and plumbing accessories.
- B. See Section 01 40 00 - Quality Requirements for additional requirements.
- C. Locate where directed.
- D. Mock-up may remain as part of the work.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Protect units from moisture damage.

1.09 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 MANUFACTURERS

- A. EGGER: www.egger.com/#sle.
- B. _____.
- C. Substitutions: See Section 01 60 00 - Product Requirements.
- D. Single Source Responsibility: Provide and install this work from single fabricator.

2.02 CABINETS

- A. Quality Standard: Custom Grade, in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), unless noted otherwise.
- B. Wood Veneer Faced Cabinet:
 - 1. Exposed Surfaces: HPVA HP-1 Grade A, Ash, plain sliced, random-matched.
 - 2. Semi-Exposed Surfaces: HPVA HP-1 Grade B, Ash, plain sliced, random-matched.
 - 3. Concealed Surfaces: Manufacturer's option.
- C. Plastic Laminate Faced Cabinets: Custom grade.
- D. Breakroom Cabinets: Plastic laminate faced, Custom grade.
- E. Cabinets at _____:
 - 1. Finish - Exposed Exterior Surfaces: Wood.
 - 2. Finish - Exposed Interior Surfaces: Wood.
 - 3. Finish - Semi-Exposed Surfaces: Wood
 - 4. Finish - Concealed Surfaces: Manufacturer's option.
 - 5. Door and Drawer Front Edge Profiles: Square edge with thin applied band.
 - 6. Door and Drawer Front Retention Profiles: Fixed panel.
 - 7. Casework Construction Type: Type A - Frameless.
 - 8. Interface Style for Cabinet and Door: Style 2 - Finish Inset; reveal overlay.
 - 9. Grained Face Layout for Cabinet and Door Fronts: Stile and Rail, all Grades.
 - a. Drawer fronts run grain either vertically or horizontally at the manufacturer's option.
 - b. Doors: Vertical grain.
 - 10. Grained Face Layout for Cabinet and Door Fronts: Flush panel.
 - a. Economy Grade: Drawer fronts run grain either vertically or horizontally at the manufacturer's option. Doors shall be vertical. Mismatch allowed.
 - b. Custom Grade: Doors, drawer fronts and false fronts wood grain to run and match vertically within each cabinet unit.
 - c. Premium Grade:
 - 1) Provide vertical run and match for doors, drawer fronts and false fronts within each cabinet unit.
 - 2) Provide well-matched doors, drawer fronts and false fronts across multiple cabinet faces in one elevation.
 - 3) Cathedral Grain: Point grain crown up and run in the same direction for entire project.
 - 11. Cabinet Design Series: As indicated on drawings.
 - 12. Adjustable Shelf Loading: 40 psf.
 - a. Deflection: L/144.
 - 13. Casework Integrity: _____.
 - 14. Cabinet Style: Flush overlay.
 - 15. Cabinet Doors and Drawer Fronts: Flush style.
 - 16. Drawer Side Construction: Multiple-dovetailed.

17. Drawer Construction Technique: Dovetail joints.

2.03 WOOD-BASED COMPONENTS

- A. Wood fabricated from old growth timber is not permitted.
- B. Provide sustainably harvested wood, certified or labeled; see Section 01 60 00.
- C. Provide wood harvested within a 500 mile radius of the project site.
- D. Wood fabricated from timber recovered from riverbeds or otherwise abandoned is permitted, unless otherwise noted, provided it is clean and free of contamination; identify source; provide lumber re-graded by an inspection service accredited by the American Lumber Standard Committee, Inc.
- E. Hardwood Edgebanding: Use solid hardwood edgebanding matching species, color, grain, and grade for exposed portions of cabinetry.

2.04 PANEL CORE MATERIALS

- A. Particleboard: Composite panel composed of cellulosic particles, additives, and bonding system; comply with ANSI A208.1.
 - 1. Grade: M-2; moisture resistance: MR10.
 - 2. Panel Thickness: 1/2 inch.
 - 3. Products:
 - a. EGGER; Eurospan Raw PB TSCA 187: www.egger.com/#sle.
 - b. Roseburg Forest Products; Particleboard: www.roseburg.com/#sle.
 - c. _____.
 - d. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Medium Density Fiberboard (MDF): Composite panel composed of cellulosic fibers, additives, and bonding system; cured under heat and pressure; comply with ANSI A208.2.
 - 1. Grade: 115; moisture resistance: MR10.
 - 2. Panel Thickness: 1 inch.
 - 3. Products:
 - a. Roseburg Forest Products; _____: www.roseburg.com/#sle.
 - b. _____.
 - c. _____.
 - d. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Basic Hardboard: Panel manufactured from inter-felted lignocellulosic fibers consolidated under heat and pressure; comply with ANSI A135.4.
 - 1. Class: Tempered.
 - 2. Surface: Smooth one side (S1S).
 - 3. Nominal Thickness: 1/4 inch.

2.05 HARDWOOD PLYWOOD PANELS

- A. Hardwood Plywood: Plywood manufactured for nonstructural decorative applications; consisting of faces and backs applied to a variety of core types; comply with HPVA HP-1.
 - 1. Woodwork Quality Standard: Panels complying with specified woodwork quality standard.
 - 2. Face: Birch; _____; grade AA.
 - a. Finish: Natural, unfinished.
 - 3. Back: Balancing backer.
 - 4. Back: Birch; plain-sliced.
 - 5. Core, Veneer Core:
 - a. Construction and Thickness: 5 plies, 3/8 inch.
 - 6. Core, Particleboard: Comply with ANSI A208.1.

2.06 THERMALLY FUSED LAMINATE PANELS

- A. Thermally Fused Laminate (TFL): Melamine- or polyester-resin-saturated decorative papers; for fusion to composite wood substrates under heat and pressure.

1. Test in accordance with NEMA LD 3 Section 3.
2. Panel Core Substrate: Particleboard.

2.07 LAMINATE MATERIALS

- A. Manufacturers:

2.08 LACQUERED PANELS

- A. Decorative UV-Coated Board:
1. Panel Core Substrate: Particleboard.
 2. Edge Treatment: ABS or PVC.

2.09 COUNTERTOPS

- A. Countertops: See Section 12 36 00.

2.10 ACCESSORIES

- A. Adhesive: Type recommended by fabricator to suit application.
1. Manufacturers:
 - a. Franklin International, Inc; Titebond Original Wood Glue: www.titebond.com/#sle.
 - b. _____.
 - c. Substitutions: See Section 01 60 00 - Product Requirements.
 - B. Plastic Edge Banding: Extruded ABS or PVC, convex shaped; smooth finish; self locking serrated tongue; of width to match component thickness.
 1. Color: As selected by Architect from manufacturer's standard range.
 2. Color: As indicated on drawings.
 3. Use at all exposed plywood edges.
 4. Use at all exposed shelf edges.

2.11 HARDWARE

- A. Cabinet Hardware: Comply with BHMA A156.9 for hardware types and grades indicated below:
1. Hardware Types: As indicated on drawings.
 2. Product Grade: Grade 2.
- B. Metal Z-Shaped Wall Cabinet Support Clips: Paired, cleated, structural anchorage components applied to back of cabinets and walls for wall cabinet mounting.
1. Material: Extruded Aluminum.
 2. Thickness: ____ inch.
 3. Height: ____ inch.
 4. Stand-Off: ____ inch.
 5. Lift-Off: ____ inch.
 6. Width: ____ inches.
 7. Products:
 - a. Eagle Aluminum; Eagle Z-Clips: www.eagle-aluminum.com/#sle.

2.12 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.

2.13 SHOP 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 wood filler matching or blending with surrounding surfaces and of types recommended for applied finishes.
- D. Finish work in accordance with AWI/AWMAC/WI (AWS) or AWMAC/WI (NAAWS), Section 5 - Finishing for grade specified and as follows:
 - 1. Transparent:
 - a. System - 1, Lacquer, Nitrocellulose.
 - b. Stain: As selected by Architect.
 - c. Sheen: Flat.
 - d. Products:

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) or AWMAC/WI (NAAWS) 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. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
- F. Secure cabinets to floor using appropriate angles and anchorages.
- G. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.
- H. Site glaze glass materials using Interior Dry method; see Section 08 80 00.

3.03 ADJUSTING

- A. Adjust installed work.
- B. Adjust moving or operating parts to function smoothly and correctly.

3.04 CLEANING

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

3.05 SCHEDULES

- A. _____: _____.

END OF SECTION 06 41 00