

SECTION 06 41 00

ARCHITECTURAL WOOD CASEWORK

PART 1 – GENERAL

1.01 SECTION INCLUDES:

- A. Laminated Plastic Work
- B. Finish Cabinet Hardware
- C. Wood Backing and Blocking

1.02 MEASUREMENT AND PAYMENT

- A. Measurement: Custom cabinetwork will be measured for payment by the lump-sum method, acceptably furnished and installed.
- B. Payment: Custom cabinetwork will be paid for at the indicated Contract lump-sum price as indicated in the Bid Schedule of the Bid Form.

1.03 REFERENCES

- A. American Plywood Association (APA):
 - 1. U.S. Product Standard PS-1 Structural Plywood
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- C. American Wood Protection Association (AWPA):
 - 1. AWPA U1 Use Category System
- D. National Electrical Manufacturer's Association (NEMA):
 - 1. NEMA LD 3 High-Pressure Decorative Laminates
- E. West Coast Lumber Inspection Bureau (WCLIB):
 - 1. WCLIB No. 17 Standard Grading Rules
- F. Architectural Woodwork Institute (AWI):
 - 1. Architectural Woodwork Standards

- G. Underwriters' Laboratories Inc.
- H. National Fire Protection Association (NFPA)
 - 1. NFPA 101, Section 10.2.3.4.1

1.04 SUBMITTALS

- A. General: Refer to Section 01 33 00, Submittal Procedures, and Section 01 33 23, Shop Drawings, Product Data, and Samples, for submittal requirements and procedures.
- B. Shop Drawings: Submit fully detailed Shop Drawings of the cabinetwork, including plastic-laminate work and countertop edging. Shop Drawings shall be prepared in accordance with AWI Architectural Woodwork Standards. Shop Drawings shall have an AWI Certified Compliance Label on the first page of drawing set.
- C. Product Data: Submit manufacturers' product data for plastic laminates, cabinet hardware, and any other manufactured or fabricated items indicated or specified.
- D. Samples: Submit samples of plastic laminates and cabinet finish hardware.
- E. Certificates: Submit AWI Certified Compliance Certificate indicating that cabinetwork and its installation meets grade specified.

1.05 QUALITY ASSURANCE

- A. Cabinetwork, as indicated, shall be manufactured or fabricated in accordance with the standard details and specifications of AWI Architectural Woodwork Standards, as hereinafter specified.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery, storage, and handling of cabinets and related items shall be in accordance with applicable requirements AWI Architectural Woodwork Standards.

PART 2 – PRODUCTS

2.01 WOOD BACKING AND BLOCKING

- A. Wood backing and blocking shall be “Construction” or “No. 1” grade Douglas fir as defined in WCLIB No. 17, of size and dimensions indicated or required. Moisture content shall not exceed 19 percent at time of installation.

1. Fire Retardant Treatment: Wood backing and blocking shall be pressure-impregnated with an fire-retardant chemical suitable for the purpose. Each treated member shall be stamped with the AWPA approved trademark and, in addition, the Classification Marking of the Underwriters' Laboratories, Inc. for Fire Hazard Classification shall be affixed to the back of each member. Wood blocking members shall be pre-cut to size and shape before being treated to preclude the need for field cutting and thus exposing untreated surfaces at cut ends. Any members which must still be cut in the field shall be dipped, after cutting, in the same fire-retardant chemical that was used in the pressure treating process.
- B. Plywood shall be Group 1 Species meeting requirements of PS 1, of sizes and thicknesses indicated or required. Each panel shall carry the APA grade trademark. Plywood shall be Exterior Grade or manufactured with Exterior Glue, with B-B, B-C or C-C (plugged) faces.
1. Fire-Retardant Treatment: Plywood shall be fire-retardant treated to have a flame spread rating of less than 25, according to NFPA 101, Section 10.2.3.4, when tested in accordance with ASTM E84. Comply also with applicable requirements specified above for wood backing and blocking.
- C. Anchors and Fasteners:
1. Wood and plywood backing and blocking shall be secured to metal framing with screws or bolts manufactured for the purpose of type and size required for the installation.
 2. Toggle bolts or screws may be employed to secure wood members to metal framing and substrates through drilled holes, providing the winged anchor is not visible in the finished work.
 3. All anchors and fasteners shall be stainless steel, galvanized, or specially treated to prevent corrosion.

2.02 CABINET MATERIALS

- A. Requirements: Unless specified otherwise herein, cabinetwork materials shall conform with the "Premium" Grade requirements of AWI Architectural Woodwork Standards. All cabinetwork, including shelves and insides of drawers, shall be manufactured with plastic-laminate surfacing. Provide all materials required to complete the work whether herein specified or not, including finish cabinet hardware, specialty items, and accessories. Cabinetry shall accommodate equipment, fixtures, and devices to be provided under other Sections of these Specifications as indicated.

B. Laminated Plastic Work:

1. Surfacing: Plastic-laminate surfacing material, exposed faces and edges, shall be a high-pressure decorative plastic laminate, conforming with NEMA LD 3. Plastic laminate material shall be solid color throughout the thickness of the material, so that when chipped or nicked, there will be no color variation from the surface color. Surface texture and color shall be as selected and approved by the Engineer from manufacturer's standards.
2. Core: The core shall be plywood or medium density fiberboard (MDF). Plywood shall be an approved close-grained hardwood-faced plywood, not less than 5-ply and graded not less than B-B, with both sides sanded. Core shall have no added formaldehyde.
3. Backing Sheet: Backing sheet shall be 0.020 inch standard (balancing) sheet plastic laminate. All laminated plastic work shall be fabricated with backing sheet.
4. Adhesive: Type I waterproof glue manufactured for veneering plastic laminate to core material.
5. Fasteners and Accessories: Provide the required anchors, plates, clips, screws, and accessories for a concealed fastening system and as required for a complete and finished installation.

C. Finish Cabinet Hardware:

1. Requirements:
 - a. Provide finish hardware for cabinets as required to complete the Work. Hardware shall be as selected and approved by the Engineer from manufacturers' standards. Cabinet hardware shall conform with the Engineer's control samples.
 - b. Furnish all items of finish hardware required to equip the cabinets complete, whether specified herein or not.
 - c. Items of hardware not definitely specified herein but necessary for completion of the Work shall be provided at no additional cost to the District. Such items shall be of type and quality suitable for the service required and comparable to adjacent hardware in style and finish.
 - d. Each cabinet door shall be provided with appropriate hinges, pull, magnetic catches, elbow catches, and stops. Hinges shall be, at minimum, five-knuckle commercial hinges. Each cabinet drawer shall be provided with pull and drawer slides. Include key-operated locks for all cabinet doors and drawers.
2. Finish: The finish of all hardware shall be US32D, satin stainless, or US26D, satin chrome.
3. Drawer Slides: Drawers shall be fitted with full-extension drawer slides, rated for 100-lb. load capacity minimum.

4. Shelf Standards and Supports: Provide shelf standards and supports of types and sizes indicated or required, conforming the District requirements and with the Engineer's control samples.
5. Door and Drawer Pulls: Provide flush cabinet door and drawer pulls (flush with cabinet face) with finger lip/grip, conforming to the Engineer's control samples.

2.03 FABRICATION

- A. Work Quality: The quality of work shall be "Premium" grade flush overlay design in accordance with the requirements for Casework of AWI Architectural Woodwork Standards. Cabinetmakers shall be skilled and experienced, and shall work under competent foremen in the shop and in the field.
- B. Laminated Plastic Work: Comply with applicable requirements of NEMA LD 3. Plastic laminate shall be applied to cores with approved waterproof adhesive. Edge laminates shall be applied first. All laminated plastic work shall have backing sheet as herein before specified.
- C. Assembly: Cabinetwork shall be assembled as fully as possible in the shop. When field assembly is necessary, the various units shall be accurately prefitted at the shop before shipment.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Installation of cabinetwork shall be as indicated and in accordance with the applicable requirements of AWI Architectural Woodwork Standards for the specified grade. Work quality shall conform to "Premium" Grade requirements, as applicable.
- B. Cabinetwork shall be securely anchored and installed as indicated, plumb and level. Use leveling legs or shims where required to level cabinets. Finished work shall be satisfactory in every respect. Provide cut-outs for sinks and equipment, as indicated.
- C. Sufficient blocking and backing shall be provided as required to securely anchor all casework and cabinets.
- D. Finish hardware shall be installed accurately and securely without marking or defacing hardware or finish work. Test to assure correct alignment and operation. Items of finish hardware shall be fastened at all points where fasteners are indicated or required. Leave all hardware in good working order. Adjust, lubricate, clean, and polish.

END OF SECTION 06 41 00