

SECTION 06 41 00
ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American National Standards Institute, Inc. (ANSI): Z124.3, Plastic Lavatories.
2. American National Standards Institute and Hardwood Plywood and Veneer Association (ANSI/HPVA): HP-1, American National Standard for Hardwood and Decorative Plywood.
3. Architectural Woodwork Institute (AWI): Quality Certification Program.
4. Architectural Woodwork Institute, Architectural Woodwork Manufacturers Association of Canada, Woodwork Institute (AWI, AWMAC, WI): Architectural Woodwork Standards.
5. Builders Hardware Manufacturers Association (BHMA):
 - a. 156.9, Cabinet Hardware.
 - b. 156.11, Cabinet Locks.
6. Federal Specifications (FS): A-A-1936, Adhesive, Contact, Neoprene Rubber.
7. International Association of Plumbing and Mechanical Officials/American National Standards Institute, Inc. (IAPMO/ANSI): Z124.6, Plastic Sinks.
8. International Organization for Standardization (ISO): 4586, High-pressure decorative laminates (HPL, HPDL) – Sheets based on thermosetting resins (usually called laminates).
9. Woodwork Institute (WI): Certified Compliance Program (CCP).

1.02 SUBMITTALS

A. Action Submittals:

1. Shop Drawings:
 - a. Show details and dimensions not controlled by job conditions and required field measurements.
 - b. Describe and illustrate features of design showing field measurements, construction details, dimensions, materials, and finish.
 - 1) Use full-size or 1/4-size scale drawings.
 - c. Furnish manufacturer's descriptive literature of specialty items not manufactured by woodwork manufacturer.

2. Samples:
 - a. Each finish to be applied by woodwork manufacturer.
 - b. Manufacturer's full range of standard color samples of each material for selection.
 - c. Casework unit complete with hardware, including locks and accessories, and top. Unit may be incorporated in the Work.

B. Informational Submittals: Proof of woodwork manufacturer qualifications.

1.03 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

1. Successful completion of comparable work on similar size project within 2 years before start of construction on this Project.
2. Quality Standards: AWI, AWMAC, WI Architectural Woodwork Standards.
3. Current member of AWI.
4. Contracting Officer reserves right to approve woodwork manufacturer selected to furnish Work.

B. Casework:

1. Reference to Premium, Custom, or Economy Grade: As defined in AWI, AWMAC, WI Architectural Woodwork Standards.
2. Provide Custom Grade, unless otherwise specified.

C. Cabinet Hardware: In accordance with BHMA 156.9 and BHMA 156.11.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Defer delivery to Site until installation and storage areas are complete and dry of wet type construction, and excessive moisture has been out of building for at least 10 days.
- B. Protect casework from damage and dampness. Store in weathertight, well-ventilated areas. Do not subject to extreme changes of temperature or humidity.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. For a minimum of 72 hours prior to installation, allow woodwork to come to equilibrium onsite in space where it is to be installed.
- B. Humidity: For 24 hours before, during, and after installation, maintain relative humidity between 25 percent and 55 percent.

- C. Temperature: For 24 hours before, during, and after installation, maintain ambient temperature between 65 degrees F and 75 degrees F.

PART 2 PRODUCTS

2.01 CASEWORK MATERIALS

A. Wood Products:

- 1. Physical Characteristics:
 - a. Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.
 - b. Wood Moisture Content: 8 percent to 13 percent.
- 2. Functional Characteristics: None.
- 3. Performance Characteristics: None.

B. Plywood:

- 1. Physical Characteristics:
 - a. APA exterior type conforming to NIST, Product Standard Section, PS 1.
 - b. Thickness: Minimum 3/4 inch.
 - c. Grade: No knots or voids present on surfaces.
 - d. Formaldehyde emissions-free, no volatile organic compound (VOC), synthetic resins.
- 2. Functional Characteristics: None.
- 3. Performance Characteristics: None.

C. Particleboard or MDF:

- 1. Physical Characteristics:
 - a. Finished with thermally fused, melamine-impregnated decorative paper and complying with requirements of ANSI/NEMA LD 3, Grade VGL, for Test Methods 3.3, 3.4, 3.6, 3.8, and 3.10.
 - b. Thickness: Minimum 3/4 inch.
 - c. Moisture Content: Maximum 8 percent.
 - d. Formaldehyde emissions-free, no volatile organic compound (VOC), synthetic resins.
- 2. Functional Characteristics: None.
- 3. Performance Characteristics: None.

D. Composite Wood and Agricultural Fiber Products:

1. Physical Characteristics:
 - a. Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.
 - b. Do not exceed maximum formaldehyde emission limits as defined by the building codes.
2. Functional Characteristics: None.
3. Performance Characteristics: None.

2.02 CASEWORK FINISH

A. Manufacturers:

1. Wilsonart.
2. Or equal.

B. Physical Characteristics:

1. Plastic Laminate: Furnish casework exposed surfaces, including top, edges, and front face, with plastic laminate.
2. Color: As shown.

C. Functional Characteristics: None.

D. Performance Characteristics:

1. Meet requirements of AWI, AWMAC, WI Architectural Woodwork Standards Section 10.
2. High-Pressure Decorative Laminate: ISO 4586 HPL/HPDL, grades as indicated. If not indicated, as required by woodwork quality standard.
 - a. Laminate Cladding for Exposed Surfaces:
 - 1) Horizontal Surfaces: Grade HGS.
 - 2) Postformed Surfaces: Grade HGP.
 - 3) Vertical Surfaces: Grade VGS.
 - 4) Edges: ABS/PVC extruded fabrication.
 - 5) Pattern Direction: Vertically for doors and fixed panels, horizontally for drawer fronts.
 - b. Materials for Semi-exposed Surfaces:
 - 1) Surfaces Other than Drawer Bodies: High-pressure decorative laminate, ISO 4586, Grade VGS.
 - 2) Edges of Plastic-Laminate Shelves: ABS/PVC extruded fabrication.
 - 3) Drawer Sides and Backs: Solid-hardwood lumber.
 - 4) Drawer Bottoms: Hardwood plywood.

- c. Concealed Backs of Panels with Exposed Plastic-Laminate Surfaces: High-pressure decorative laminate, ISO 4586, Grade BKL.

2.03 CASEWORK HARDWARE

A. Hinges:

- 1. Manufacturers:
 - a. Blum, Inc.
 - b. Or equal.
- 2. Physical Characteristics: For flush overlay, use pin, pivot, or European style hinge; 626 satin chrome finish.
- 3. Functional Characteristics: None.
- 4. Performance Characteristics: None.

B. Wire Pulls:

- 1. Manufacturers:
 - a. Mockett; DP57B.
 - b. Or equal.
- 2. Physical Characteristics: 4-inch center to center; 626 satin chrome or satin stainless finish.
- 3. Functional Characteristics: None.
- 4. Performance Characteristics: None.

C. Drawer Slides:

- 1. Manufacturers and Products:
 - a. Knappe and Vogt; No. 6500.
 - b. Or equal.
- 2. Physical Characteristics:
 - a. Full extension drawer slide, lever disconnect for drawer removal and a closed position hold-in anti-rebound.
 - b. For up to 30-inch wide drawers.
 - c. Steel ball bearing.
- 3. Functional Characteristics: None.
- 4. Performance Characteristics: 125-pound class.

D. Shelf Supports:

- 1. Manufacturers and Products:
 - a. Knappe and Vogt; No. 255/256.
 - b. Or equal.

2. Physical Characteristics:
 - a. Pilaster: Built-in pilaster shelving, high-strength steel mortise-mount, 1/2-inch vertical slot adjustment and countersunk nail, screw and staple holes, white finish.
 - b. Shelf Support Clip: For use with solid shelves, steel, white finish.
3. Functional Characteristics: None.
4. Performance Characteristics: 500-pound capacity per shelf.

2.04 SOLID SURFACE FABRICATIONS

A. Manufacturers and Products:

1. Wilsonart LLC; Solid Surface.
2. Or equal.

B. Physical Characteristics:

1. Solid Polymer Components: Cast, nonporous, filled polymer, not coated, laminated or of composite construction.
2. Countertops:
 - a. Thickness:
 - 1) Countertops, Backsplashes, and Window Sills: 1/2 inch.
 - b. Edge Treatment: Round edge.
 - c. Color: As shown.

C. Functional Characteristics: None.

D. Performance Characteristics: Through body colors meeting ANSI Z124.3 or ANSI Z124.6.

2.05 ANCILLARY MATERIALS

A. Adhesives:

1. Solid Surfacing: As recommended by manufacturer.
2. Woodwork:
 - a. Physical Characteristics: Phenol-resin or resorcinol-resin, two-part system.
 - b. Functional Characteristics: None.
 - c. Performance Characteristics: None.
3. Plastic Laminate:
 - a. Physical Characteristics: Contact cement – polychloroprene rubber-based contact adhesive to form permanent bond. Heat resistant and water resistant when dry.
 - b. Functional Characteristics: None.
 - c. Performance Characteristics: FS A-A-1936.

- B. Woodwork Putty:
 - 1. Physical Characteristics: Single component, acrylic latex polymer, color to match finish.
 - 2. Functional Characteristics: None.
 - 3. Performance Characteristics: None.
- C. Hardware: Furnish fasteners and miscellaneous hardware required for assembling and anchoring woodwork, including casework.

2.06 FABRICATION

- A. Moisture Content: Kiln dry lumber to an average moisture content range as follows:
 - 1. Interior Work: 5 percent to 10 percent.
- B. Casework Construction: AWI, AWMAC, WI Architectural Woodwork Standards Section 10, Custom Grade, Type A, Style 1, flush overlay.
- C. Casework Fronts: Plastic laminate.
- D. Casework Units: Shop assembled for field installation.
- E. Install concealed hinges on doors.
- F. Drawer Slides: Use side-mounted, heavy-duty type.
- G. Install casework hardware in accordance with manufacturer's instructions.
 - 1. Provide items where indicated and as required for a complete installation.
 - 2. Provide pulls on casework doors unless indicated otherwise.

PART 3 EXECUTION

3.01 PREPARATION

- A. Examine grounds, stripping, and blocking for cabinet attachment.
- B. Do not proceed to install until conditions are acceptable to installer.
- C. Verify surfaces to receive architectural woodwork items are properly prepared.

3.02 CASEWORK INSTALLATION

- A. Coordinate installation of, and cut openings for mechanical, electrical, and other items that penetrate casework surfaces and tops.
- B. Install casework in true alignment, level, and plumb.
- C. Secure units with nails or screws to cleats that have been anchored to building structure or wall framing.
- D. Install wall-hung cabinets to rigidly support cabinet weight plus normally expected weight of cabinet contents.
- E. Accurately scribe and closely fit faceplates, filler strips, and trim strips to irregularities of adjacent surfaces.
- F. Adhere plastic laminate as recommended by laminate manufacturer.
 - 1. Apply with as few cross joints as possible and no longitudinal joints.
 - 2. Scribe neatly to vertical surfaces.
- G. Toe Space at Front of Cabinets: Provide by installing front face of cabinets 3 inches in front of base face.

3.03 ARCHITECTURAL WOODWORK INSTALLATION

- A. Install horizontal members level and vertical members plumb.
- B. Miscellaneous: Furnish fasteners and miscellaneous hardware required for assembling and anchoring woodwork.
- C. Set finish nails in woodwork sufficiently to fill set hole with putty, not wax.

3.04 ADJUSTING AND CLEANING

- A. Adjust hardware and leave in smooth working condition.
- B. Adjust doors and drawers to operate without restriction.
- C. Surfaces: Clean and ready for use.
- D. Staining or Discoloration of Finish: Restore to original finish or replace unit.

END OF SECTION