

SECTION 123530 - RESIDENTIAL CASEWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes:
 - 1. Kitchen Cabinets.
 - 2. Vanity Cabinets.
 - 3. Plastic-laminate countertops.
- B. Related Sections:
 - 1. Division 11 Section "Residential Appliances" for appliances.
 - 2. Division 12 Section "Stone Countertops" for stone countertops.
 - 3. Division 22 Section "Residential Plumbing Fixtures" for sinks and plumbing fittings.

1.3 DEFINITIONS

- A. MDF: Medium-density fiberboard.
- B. Exposed Surfaces of Cabinets: Surfaces visible when doors and drawers are closed, including visible surfaces in open cabinets or behind glass doors.
- C. Semiexposed Surfaces of Cabinets: Surfaces behind opaque doors or drawer fronts, including interior faces of doors, interiors and sides of drawers, and bottoms of wall cabinets.
- D. Concealed Surfaces of Cabinets: Surfaces not usually visible after installation, including sleepers, web frames, dust panels, bottoms of drawers, ends of cabinets installed directly against and completely concealed by walls or other cabinets, and tops of wall cabinets and utility cabinets.

1.4 ACTION SUBMITTALS

- A. Product Data: For the following:

1. Cabinets.
 2. Cabinet hardware.
 3. Plastic –lamine countertops.
- B. Shop Drawings: For cabinets and countertops. Include plans, elevations, details, and attachments to other work. Show materials, finishes, filler panels, and hardware, edge and backsplash profiles, methods of joining countertops and cutouts for plumbing fixtures..
- C. Samples for Initial Selection: For cabinet finishes.
- D. Samples for Verification: 8-by-10-inch (200-by-250-mm) Samples for each selected type of finish and the following:
1. Exposed hardware, for each type of item.
 2. Plastic laminate for countertops for each selected countertop finish laminated to manufacturer's standard substrate, 8 by 10 inches (200mm by 250mm).

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Product Certificates: For casework.

1.6 QUALITY ASSURANCE

- A. Source Limitations for Cabinets: Obtain cabinets from single source from single manufacturer.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install casework until building is enclosed, wet work is complete and dry, and temporary HVAC system is operating and maintaining temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Established Dimensions: Where casework is indicated to fit to other construction, establish dimensions for areas where casework is to fit. Coordinate construction to ensure that actual dimensions correspond to established dimensions. Provide fillers and scribes to allow for trimming and fitting.
- C. Field Measurements: Where casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes to allow for trimming and fitting.

1.8 COORDINATION

- A. Coordinate layout and installation of blocking and reinforcement in partitions for support of casework.

- B. Coordinate locations of utilities that will penetrate countertops or backsplashes.

PART 2 - PRODUCTS

2.1 CABINETS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Armstrong Cabinet Products.
 - 2. Carbide Industries, LLC.
 - 3. KraftMaid Cabinetry, Inc.
 - 4. Leedo Cabinetry.
 - 5. Mastercraft Cabinets, Inc.
 - 6. Mill's Pride.
 - 7. Saco Industries, Inc.
- B. Quality Standard: Provide cabinets that comply with KCMA A161.1.
 - 1. KCMA Certification: Provide cabinets with KCMA's "Certified Cabinet" seal affixed in a semiexposed location of each unit and showing compliance with the above standard.
- C. Face Style: Flush overlay; door and drawer faces cover cabinet fronts with only enough space between faces for operating clearance.
- D. Cabinet Style: Face frame.
- E. Door and Drawer Fronts: Manufacturer's standard solid-wood stiles and rails with solid-wood center panels.
- F. Face Frames: 3/4-by-1-5/8-inch (19-by-41-mm) solid wood with glued mortise and tenon or doweled joints.
- G. Exposed Cabinet End Finish: Manufacturer's standard finish to match cabinet face finish.
- H. Cabinet End Construction: Manufacturer's standard 3/8-inch- (9.5-mm) minimum thick furniture board or plywood.
- I. Cabinet Tops and Bottoms: Manufacturer's standard 3/8-inch- (9.5-mm) minimum thick furniture board or plywood., fully supported by and secured in rabbets in end panels, front frame, and back rail.
- J. Back, Top, and Bottom Rails: Manufacturer's standard 3/4-by-2-1/2-inch (19-by-63-mm) solid wood, interlocking with end panels and rabbeted to receive top and bottom panels. Back rails secured under pressure with glue and with mechanical fasteners.
- K. Wall-Hung-Unit Back Panels: Manufacturer's standard 3/8-inch- (9.5-mm) minimum thick furniture board or plywood.

- L. Base-Unit Back Panels: Manufacturer's standard 3/8-inch- (9.5-mm) minimum thick furniture board or plywood fastened to rear edge of end panels and to top and bottom rails.
- M. Front Frame Drawer Rails: Manufacturer's standard 3/4-by-1-1/4-inch (19-by-32-mm) solid wood mortised and fastened into face frame.
- N. Drawers: Fabricate with exposed fronts fastened to subfront with mounting screws from interior of body.
 - 1. Join subfronts, backs, and sides with glued rabbeted joints supplemented by mechanical fasteners or glued dovetail joints.
 - 2. Subfronts, Backs, and Sides: Manufacturer's standard 1/2-inch- (12.7-mm-) minimum thick furniture board, plywood or solid wood.
 - 3. Bottoms: Manufacturer's standard 1/2-inch- (12.7-mm) minimum thick furniture board or plywood.
- O. Shelves: Manufacturer's standard 3/4-inch- (19-mm) minimum thick furniture board or 1/2-inch- (12.7-mm) minimum thick plywood.
- P. Joinery: Rabbet backs flush into end panels and secure with concealed mechanical fasteners. Connect tops and bottoms of wall cabinets and bottoms and stretchers of base cabinets to ends and dividers with mechanical fasteners. Rabbet tops, bottoms, and backs into end panels.
- Q. Factory Finishing: Finish cabinets at factory. Defer only final touchup until after installation.

2.2 CABINET MATERIALS

- A. General:
 - 1. Adhesives shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers." including 2004 Addenda.
 - 2. Composite Wood and Agrifiber Products: Products shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers." Including 2004 Addenda.
 - 3. Hardwood Lumber: Kiln dried to 7 percent moisture content.
 - 4. Softwood Lumber: Kiln dried to 10 percent moisture content.
 - 5. Hardwood Plywood: HPVA HP-1; made with adhesive containing no urea formaldehyde.
 - 6. Particleboard: ANSI A208.1, Grade M-2; made with binder containing no urea formaldehyde.
 - 7. Particleboard: Straw-based particleboard complying with requirements in ANSI A208.1, Grade M-2, except for density.
 - 8. MDF: ANSI A208.2, Grade MD; made with binder containing no urea formaldehyde.
 - 9. Hardboard: ANSI A135.4, Class 1 Tempered.

B. Exposed Materials:

1. Exposed Wood Species: Manufacturer's standard domestic hardwood species.
 - a. Select materials for compatible color and grain. Do not use two adjacent exposed surfaces that are noticeably dissimilar in color, grain, figure, or natural character markings.
 - b. Staining and Finish: As selected by Architect from manufacturer's full range.
2. Solid Wood: Clear hardwood lumber of species indicated, free of defects.
3. Plywood: Hardwood plywood with face veneer of species indicated, with Grade A faces and Grade C backs of same species as faces.

C. Semiexposed Materials: Unless otherwise indicated by manufacturer's standards, provide the following:

1. Solid Wood: Sound hardwood lumber, selected to eliminate appearance defects. Same species as exposed surfaces or stained to be compatible with exposed surfaces.
2. Plywood: Hardwood plywood with Grade C faces and not less than Grade 3 backs of same species as faces. Face veneers of same species as exposed surfaces or stained to be compatible with exposed surfaces.
3. Plastic Laminate: Particleboard faced with high-pressure decorative laminate complying with NEMA LD 3, Grade CLS.
 - a. For backs of doors and drawer fronts faced with plastic laminate, provide same grade, pattern, color, and texture of plastic laminate as for faces.
 - b. For face frames faced with plastic laminate, provide plastic-laminate edges of same grade, pattern, color, and texture of plastic laminate as for faces.
 - c. For shelves faced with plastic laminate, provide plastic-laminate edges of same grade, pattern, color, and texture of plastic laminate as for faces.
 - d. Colors, Textures, and Patterns: As selected by Architect from cabinet manufacturer's full range.

D. Concealed Materials: Manufacturer's standard solid wood or plywood, of any hardwood or softwood species, with no defects affecting strength or utility; particleboard; MDF; or hardboard.

2.3 CABINET HARDWARE

- A. General: Manufacturer's standard units complying with BHMA A156.9, of type, size, style, material, and finish as selected by Architect from manufacturer's full range.
- B. Pulls: Back-mounted decorative pulls.
- C. Hinges: Manufacturer's standard configuration and finish.
- D. Drawer Guides: Manufacturer's standard epoxy-coated-metal, self-closing drawer guides; designed to prevent rebound when drawers are closed; with nylon-tired, ball-bearing rollers; and complying with BHMA A156.9, Type B05011 or Type B05091.

2.4 PLASTIC-LAMINATE COUNTERTOPS

- A. Quality Standard: KCMA A161.2.
- B. Configuration: Provide post-formed countertops with the following front, cove (intersection of top with backsplash), backsplash, and endsplash style:
 - 1. Front: Integral with top – double radius edge.
 - 2. Backsplash: Integral with top – rolled and cove.
 - 3. Endsplash: Square edge.
- C. Plastic-Laminate Substrate: Particleboard not less than 3/4 inch (19 mm) thick.
 - 1. For countertops at sinks and lavatories, use Grade M-2-Exterior-Glue particleboard or exterior-grade plywood.
 - 2. Build up countertop thickness to 1-1/2 inches (38 mm) at front, back, and ends with additional layers of particleboard laminated to top.
- D. Paper Backing: Provide paper backing on underside of countertop substrate.

2.5 COUNTERTOP MATERIALS

- A. Plastic Laminate: High-pressure decorative laminate complying with NEMA LD 3.
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Formica Corp.
 - b. Pionite Decorative Surfaces.
 - c. Wilsonart International.
- 2. Grade: HGS
- 3. Colors, Textures, and Patterns: As selected by Architect from plastic-laminate manufacturer's full range.
- C. Composite Wood and Agrifiber Products: Provide products that comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers," including 2004 Addenda.
- D. Particleboard: ANSI A208.1, Grade M-2-Exterior Glue.
- E. Plywood: Exterior softwood plywood complying with DOC PS 1, Grade C-C Plugged, touch sanded.
- F. Adhesives: Do not use adhesives that contain urea formaldehyde.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, with Installer present, for compliance with requirements for installation tolerances, location of framing and reinforcements, and other conditions affecting performance of casework.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install cabinets with no variations in flushness of adjoining surfaces; use concealed shims. Where cabinets abut other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match cabinet face.
- B. Install cabinets without distortion so doors and drawers fit the openings, are aligned, and are uniformly spaced. Complete installation of hardware and accessories as indicated.
- C. Install cabinets level and plumb to a tolerance of 1/8 inch in 8 feet (3 mm in 2.4 m).
- D. Fasten cabinets to adjacent units and to backing.
 - 1. Fasten wall cabinets through back, near top and bottom, and at ends not more than 16 inches (400 mm) o.c. with No. 10 wafer-head screws sized for not less than 1-1/2-inch (38-mm) penetration into wood framing, blocking, or hanging strips.

3.3 ADJUSTING AND CLEANING

- A. Adjust cabinets and hardware so doors and drawers are centered in openings and operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.
- B. Clean casework on exposed and semiexposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas.

END OF SECTION 123530