# Part 1 GENERAL

* 1. **SECTION INCLUDES**
     1. Fabricated base cabinet units.
     2. Fabricated wall units.
     3. Fabricated countertops.
     4. Teaching Wall Cabinets.

# REFERENCES

* + 1. NEMA LD-3 - High Pressure Decorative Laminates.
    2. PS 1 - Construction and Industrial Plywood.
    3. PS 20 - American Softwood Lumber Standard.
    4. PS 51 - Hardwood and Decorative Plywood.
    5. WI - Woodwork Institute, Manual of Millwork, Latest Edition.
    6. Chapters 11 and 16A, California Building Code.
    7. ANSI A208.1 Wood Particle Board.
    8. AQMD - Local Air Quality Management District Regulations.

# SUBMITTALS

* + 1. Shop drawings including materials, component profiles, fastening methods, assembly methods, joint details, accessory listings and schedule of finishes.
    2. Product data.
    3. One hardware sample board identified with the project name, cabinet manufacturer's name and address and one item of each type of hardware specified for installation.
    4. Complete line of plastic laminate chips, in wood grains and solid colors, identified with the manufacturer's name and chip number.

# QUALITY ASSURANCE

* + 1. Cabinets and countertops shall be manufactured in accordance with Sections 15, 16 of the latest edition of the Manual of Millwork of the Woodwork Institute for Grade specified herein or to higher standards as specified herein.
    2. Before delivery to the jobsite, the casework supplier shall submit a WI Certified Compliance Certificate indicating the products furnished for this job, and certifying that they will fully meet all the requirements of the grade or grades specified.
    3. First page of shop drawings shall bear the WI Certified Compliance Label.
    4. hop drawings not conforming to this requirement will be rejected.
    5. Statement shall appear prominently on the shop drawings certifying that all casework construction complies to the structural requirements of Table 16A-0, California Building Code for required horizontal force factor for anchorage of non-structural components.
    6. One (1) copy of the latest issue of the WI Manual of Millwork shall be made available for reference at the jobsite throughout the installation period.
    7. Inspections by Authorized WI inspectors shall be made in accordance with the following schedule:
       1. Shop inspection at place of manufacturer, prior to initial shipment of cabinet components to site.
       2. Site inspection immediately following installation of first cabinet components.
       3. Site inspection immediately following final installation of all cabinet Work.
       4. Additional site inspections may be required at the option of the Architect and at no cost to the Owner when certified WIC inspection reports indicate unsatisfactory conformance with specified requirements.
    8. Written confirmation of all WI inspections shall be submitted, including a WI Certified Compliance Certificate for installation.
    9. WI Certification costs shall be the Contractors responsibility.
    10. Mock-up
        1. Provide full size base cabinet with countertop and upper cabinet of each casework type indicated, in specified finish with hardware installed. Include pairs of doors for both base and upper cabinet and at least one drawer.
        2. Units will establish a minimum standard of quality for this Work.
        3. Approved units may be used as part of the Work.

# DELIVERY, STORAGE AND HANDLING

* + 1. Deliver all materials only when the project is ready for installation and a clean storage has been provided in accordance with the WI Manual of Millwork.

# Part 2 PRODUCTS

* 1. **GRADES**
     1. Provide plastic covered casework in accordance with WI Manual of Millwork, Section 15 for Custom grade.
     2. Construction Style: Style A frameless.
     3. Construction Type: Type I multiple self-supporting units rigidly joined together.
     4. Door and Drawer Front Style: Flush overlay.
     5. Banding**: NO PVC banding** permitted. Only self-edged Plastic Laminate at all countertop, drawer, and door edging.

# MANUFACTURERS

* + 1. Products of the following manufacturers form the basis for design and quality intended.
       1. Formica Corporation, Cincinnati, OH.
       2. Wilsonart by Ralph Wilson Plastics Co., Temple, TX.

# CASEWORK UNITS

* + 1. Casework indicated on drawings shall conform to model Series described below:
       1. Base Cabinets: WI, 100 Series.
       2. Drawer Base Cabinets: WI, 200 Series.

a.File drawers with built-in steel rail system for hanging folders.

* + - 1. Wall Hung Cabinets: WI, 300 Series.
      2. Tall Storage Cabinets: WI, 400 Series.
      3. Tall Wardrobe Cabinets: WI, 500 Series.
      4. Library Cabinets: WI, 600 series.
      5. Teaching Wall Cabinet: Refer to Drawings.

# LAMINATE MATERIALS

* + 1. Plastic Laminate Cabinet Surfaces: NEMA LD-3, decorative High Pressure Laminate, general purpose type, 0.028 inch thick at vertical surfaces, 0.050 inch thick at horizontal surfaces and 0.042 inch thick for post-formed work.
       1. Upper and lower casework (doors of base cabinets and wall cabinets): Wilsonart. Cabinet main surface color: 7909-60 Fusion Maple Wilsonart: Cabinet accent **only** color: D50-60 Kaki Brown
    2. Plastic Laminate Countertops: NEMA LD-3, decorative High Pressure Laminate, general purpose type, 0.042 inch thick when post-formed, 0.050 inch thick when flat. Conform to Section 16, WI Manual of Millwork
       1. Countertops: Wilsonart. Color: 4674-60 Evening Tigris
    3. Laminate Backing Sheet: NEMA LD-3 BKS/-91 Backing grade, undecorated plastic laminate, with face material of 0.028 inches or BKS/-92 with face material of .050 inches.
    4. Cabinet interiors including faces of shelving and interior door faces: finish with cabinet liner
       1. Apply decorative High Pressure Laminate to all surfaces visible from a seated or standing position, including interior surfaces of open casework, shelving, and casework with glass doors, sloped tops, and to tops up to 72 inches above floor or visible from an upper level.
       2. Apply decorative High Pressure Laminate to shelving and all surfaces behind marker boards and at all Teaching Wall Units.
       3. Refer to Section 09050 Colors and Materials, for finish schedule.

# EPOXY RESIN COUNTERTOPS AND SINKS

* + 1. Provide per section 11 61 10

# WOOD MATERIALS

* + 1. Softwood Lumber: PS 20; Graded in accordance with WI Custom Grade, Douglas Fir, Hemlock, Ponderosa Pine or Sugar Pine.

# SHEET MATERIALS

* + 1. Core, one of Following:
       1. Wood Particleboard: ANSI A208.1, Table I, Grade 1-M-2, composed of wood chips, medium density made with water-resistant binder.
       2. Plywood PS 51; rotary cut Philippine Mahogany, or other close-grain hardwood plywood with SOUND grade face veneer and crossband layer of Grade C or better.

# ACCESSORIES

* + 1. Adhesives: Urea-formaldehyde cold setting or phenol resin with catalytic agent set under a pressure of not less than 30 lbs/sq/in or any contact adhesive that has been tested in accordance with the PS 51 for Type II Adhesive and Heat Resistance Test set forth in the WI Manual of Millwork and specifically approved by WI for the area in which the Project is located.
       1. Adhesives shall comply with AQMD, Local Regulations.
    2. Fasteners: Size and type to suit application.
    3. Bolts, Nuts, Washers, Lags, Pins and Screws: Of size and type to suit application.
    4. Doorstop Blocks: Nylon type, 1 inch x 1 inch x 2 inches long.
    5. Cable Grommets: Molded-plastic grommets 2 1/2 inch diameter and matching plastic caps with slot for wire passage, Hafele 429.99, color: black.

# HARDWARE

* + 1. Conform to Supplement No. 1 to Section 14 and 15, WI Manual of Millwork and CBC Sections 11B.804 Any hardware listed therein may be installed, except where these standards are exceeded as described below:
       1. Drawer Slides: Minimum 100 lb. capacity all drawers. Full extension ball bearing type only, Accuride 3832.
       2. Wall Shelf Standards: KV #87 Heavy duty type. Bracket KV#187.
       3. Cabinet Shelf Standard: Flush type, KV #255 steel, Zinc finish, clip 256R.
       4. Shelf Seismic Restraint Clip at all open overhead shelves: Hettich # 1005767.
       5. Hinges: Grade 1, heavy-duty wrap-around, tight pin butts only, satin chrome, RPC 851.
       6. Wire Pulls: “U” shaped, Trimco/BBW No. 562- 3 1/2 inch c. to c. stainless steel.
       7. Locks: Minimum pin tumbler, OLYMPUS-700SC Schlage keyway, all doors, 800SC all drawers. Key to match building keying system. Each room keyed alike. Each room to have its own change key. All cabinet locks keyed to a master.
       8. Elbow Catches: EPCO 1018 Chrome at inactive cabinet door leaf.
       9. Magnetic Catches: EPCO 592, all cabinet doors, 5 pound holding strength.
       10. Coat Hooks: wall mounted, single: Ives 581, double: Ives 580.
       11. Sliding Door Pulls: KV-813 elongated recessed chrome finger pull.
       12. Keyboard and pencil Slide: 75 lb. Accuride 2019.
    2. Finish: US-26D, Satin Chromium Plated.

# FABRICATION

* + 1. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
    2. When necessary to cut and fit on site, provide materials with ample allowance for cutting.
    3. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Make corners and joints hairline. Locate counter butt joints minimum 2 feet from sink cutouts.
    4. Install one door stop block screwed on the inside bottom of the inactive leaf to prevent the door from being pushed down to gain entry at all double doors base cabinets. Secure with 2 screws 1-1/2 long at each block.
    5. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings. Verify locations of cutouts from on-site dimensions. Seal contact surfaces of cut edges.
    6. Backsplash: Coved.
    7. Edge: Full rolled for typical units. No-drip bullnose where sinks occur.
    8. Shelf Loading: 50 lbs. per square foot or 50 lbs. per cubic foot of total volume of cabinet whichever is less. In no case shall unsupported shelf exceed 36” wide without mid support. Conform to California Building Code Chapter 16.
    9. Shelf Thickness: 1 inch. All shelf edges to be finished with plastic laminate.
    10. Unless otherwise noted on the plans, install one cable grommet per workstation or at every 48 inches of work counter. Verify with owner.

# Part 3 EXECUTION

* 1. **PREPARATION**
     1. Verify adequacy of backing and support framing.

# INSTALLATION

* + 1. Set and secure casework in strict accordance with the WI Manual of Millwork.
    2. Casework shall be anchored to walls or floors or both. Conform to Chapter 16, California Building Code anchorage requirements.

# ADJUSTING AND CLEANING

* + 1. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly and correctly.
    2. Clean casework, counters, shelves, hardware, fittings and fixtures.

# END OF SECTION