

**PART 1 GENERAL****1.1 SCOPE OF WORK**

Includes all factory fabricated modular casework as required by project drawings. Exposed surfaces are laminated with decorative high pressure plastic laminate or hardwood veneer. Semi-exposed surfaces are overlaid with low pressure thermofused melamine laminate. Westmark offers four styles of casework:

- Series 100- Reveal overlay style with 3mm PVC edgebanding in a select range of color options.
- Series 200- Full overlay style with matching .018" PVC edgebanding in a full range of color options.
- Series 300- Full overlay style with 3mm edgebanding in a select range of PVC colors or hardwoods.
- Series 400- Reveal overlay style with matching .018" PVC edgebanding in a full range of color options.

**A. TYPICAL INCLUSIONS**

1. Base and wall cabinets.
2. Open shelf cabinets.
3. Wardrobe cabinets.
4. Display cabinets.
5. Custom casework assemblies.
6. Countertops - standard plastic laminate or special purpose such as chemical resistant plastic laminate, epoxy resin, metal, hardboard, or laminated hardwood.
7. Plastic laminate window sills.
8. Mirrors, glass and glazing in or on cabinets.
9. Hardware to provide a complete operating casework system.
10. Tackboards and support brackets which are part of casework.
11. Cut-outs for sinks or other equipment.
12. Broom cleaning of all casework at completion of installation.
13. Trained finish carpenters to install and adjust complete casework system.

**B. TYPICAL EXCLUSIONS**

1. Prefinishing, priming, or painting, unless so specified.
2. Vinyl, rubber or carpet base.
3. Metal support brackets that are part of the building structure.
4. Blocking, furring or stripping to walls where required.
5. Mirrors, glass or glazing not part of the cabinet.
6. Electrical fixtures and telephone equipment.
7. Ceramic tile for countertops.
8. Sinks, faucets and connections to such.
9. All wall framing that is part of building structure.
10. Work not directly associated with the casework.

**1.2 REFERENCE STANDARDS****A. ALL MATERIALS SHALL CONFORM TO THESE REQUIREMENTS**

1. Decorative, high pressure plastic laminates NEMA LD-3 (National Electrical Manufacturers Association).
  - Horizontal Grade .050" = GP50
  - Postforming Grade .042" = PF42
  - Vertical Grade .028" = VG28
  - Cabinet Liner Grade .020 = CL20
  - Chemical Resistant Grade .036"
2. Low pressure thermofused polyester and melamine laminates - ALA (American Laminators Association).
3. PVC Edgebanding (polyvinyl chloride) on seamless rolls to be applied with automatic edgebanding machines using hot-melt adhesives. Product to be chip proof, flame and moisture resistant.
4. Particleboard - ANSI-208.1 (American National Standards Institute).
5. Softwood plywood - U.S. Product Standards PS1.
6. Hardwood plywood - ANSI-HPVA (Hardwood Plywood & Veneer Association).
7. Hardboard - ANSI-AHA 135.484 (American Hardboard Association).
8. PVA Adhesive (polyvinyl acetate) white glue, Type III - ASTM-D3110 (American Society for Testing and Materials).
9. Aliphatic Adhesive (carpenters glue) Type II - ASTM-D3110 (American Society For Testing and Materials).
10. Solvent based contact cement - MMM-A-J130B.
11. Workmanship complies with industry standards - AWI (Architectural Woodwork Institute) WIC (Woodwork Institute of California).

**1.3 SUBMITTALS****A. SHOP DRAWINGS**

1. Complete shop drawings submitted showing all casework, elevations, plans, cross sections and installation details. Surface finishes will be noted along with information about equipment being installed into casework requiring coordination of other trades.
2. Where locks are required a complete keying schedule will be submitted with proposed keying for review by owner.

**B. SAMPLES**

1. Samples of plastic laminate showing full line of color selections available shall be provided. Also, samples of actual hardware or catalog cut sheets shall be submitted on manufacturer's standards.
2. Sample cabinets shall be provided to show hardware, construction techniques, and workmanship.
3. These samples may be retained for verification that project work is of the same quality.

## K. DRAWER ACCESSORIES

1. Standard hanging file - PVC rails fitted to top of drawer sides. Available for both letter and legal size files. Rails are color matched to cabinet interior.
2. Lateral hanging files - 1" x 1/8" zinc plated steel flat bars adjustable for both letter and legal size files.

## L. MIRRORS

1. 1/4" Thick polished plate glass mirror.
2. Retainer clips, clear plastic screw mount.

## M. WALL STANDARDS AND BRACKETS

1. Shelves under 12", zinc plated steel, adjustable 1" centers. K & V #80 standards with #180 brackets.
2. Shelves 12" and deeper, zinc plated steel, adjustable 2" centers. K & V #87 standards with #187 brackets.

## N. CASTERS

1. Casters have grey rubber tires with a lock mechanism that locks both the swivel and the tire rotation. Casters are bolted to a steel frame or, on small cabinets, bolted through the bottom.
2. 5" Swivel with brake 200 lb. rating.
3. 5" Swivel without brake 200 lb. rating.
4. 3" Swivel with brake 130 lb. rating.
5. 3" Swivel without brake 130 lb. rating.

## O. STEEL LEGS AND FRAME ASSEMBLIES

1. Leg supports or frame assemblies are constructed of 15 gauge 1 1/2" tube steel with welded joints. Frames are cleaned in an acid bath and powder coated in almond, white, folkstone grey, and black colors.
2. Legs are fitted with stainless steel levelers to provide leveling adjustment.

## P. LOCKS

1. Locks are a dead bolt type, constructed with solid brass cylinder and five pin tumblers. Exposed finish is US26D satin chrome. Standard keying is alike per room, different between rooms and master keyed, other keying available upon request.
2. Slide bolt used on inactive door when pair of doors require lock.
3. Sliding door - Plunger type lock.
4. Sliding glass door - Ratchet type lock.

## Q. WIRE, PAPER AND TRASH GROMMETS

1. Wire Grommets - Provided with removable and adjustable caps available in almond, folkstone grey, white and black. Size 65mm (2 1/2") diameter.
2. Trash Grommet - 6" diameter plastic insert to be glued into countertop for trash hole. Available in folkstone grey, almond, white and black.

## R. LABEL HOLDER

1. 1/2" x 2" Name tag holder, satin chrome finish.
2. 1" x 2" Name tag holder, satin chrome finish.

## S. MOBILE CABINET FRAMES

1. 1 1/2" tube steel, 15 gauge frame at top and bottom of mobile units with 1/4" steel plates welded at corners of lower frame for caster to mount. Frames are powder coated to match cabinet interior color.

## T. WOOD DOWELS

1. Cabinet construction dowels shall be 8mm diameter x 30mm length, multi-grooved hardwood.
2. Drawer construction dowels shall be 6mm diameter x 25mm length multi-grooved hardwood.

## U. SUPPORT BRACKETS

1. Countertop support brackets are constructed of 15 gauge 1 1/2" tube steel, with welded construction, designed to support countertops off finished wall at desired heights. Brackets are powder coated to match cabinet interiors and available in two sizes.
  - a. 18" x 21" Legs for up to 26" deep countertop. Westmark #A1821.
  - b. 21" x 27" Legs for up to 32" deep countertop. Westmark #A2127.
2. Single shelf support brackets are constructed of 1 1/4" flat bar with 1/4" wire rod gusset. Brackets are all welded construction designed to support up to a 15" deep wall shelf. Brackets are powder coated to match cabinet interiors. Westmark #A1010.

## V. TOTEMATE® TRAYS

1. Totemate® trays shall be one piece molded structural foam polypropylene plastic with handle and label holder at each end. Trays are available in either folkstone grey or almond and come in 2 sizes:
  - a. Large Tray - 13 3/4" x 19 7/8" x 4 5/16" h.
  - b. Small Tray - 10" x 19 7/8" x 4 5/16" h.

## W. GLASS DOORS AND SHELVES

1. Stile and rail cabinet doors shall be glazed with 1/4" thick plate or tempered glass as required. The glass is stopped in with removable PVC stops to match trim color.
2. Frameless glass sliding doors and small glass shelves shall be 1/4" thick tempered glass. 1/2" x 3" Ground-in finger pull at mid-height on doors. Exposed edges shall be polished for appearance.
3. Large glass shelves shall be either 3/8" or 1/2" thick tempered glass as required.

## PART 3 CONSTRUCTION

### 3.1 CABINET COMPONENTS

#### A. DRAWERS (WOOD CONSTRUCTION)

1. Drawer fronts shall be 11/16" thick particleboard overlaid with high pressure plastic laminate on both faces to equal 3/4" thickness. Inside color to match cabinet interiors with face color to be selected. Edges are banded with 3mm PVC for 100 and 300 Series and .018" PVC for 200 and 400 Series. Edge colors are chosen from a select range to either complement or match the face color.
2. Drawer sides shall be 1/2" thick particleboard overlaid with thermofused melamine on two sides to match cabinet interior. Top edges are banded with .018" PVC to match interior. Drawer parts are joined together with 6mm x 25mm hardwood dowels 32mm on centers.
3. Drawer bottoms, sub-fronts and backs shall be 1/2" particleboard with factory applied coating to both faces. Bottoms are tongued into sides, back and sub-front, glued and clamped to produce a rigid square drawer. Interior face color to match cabinet interiors.
  - Note to specifier: At additional cost 1/2" thick plywood overlaid to match cabinet interiors can be specified for drawer parts. Drawer construction remains the same.
4. Drawer fronts shall be attached to the sub-fronts with minimum of four #8 x 1" panhead screws.
5. Drawers shall be mounted with positive in and out stops to provide permanent and quiet operation. Drawer fronts that impact cabinet body will not be allowed.
6. All drawers to have roller guides as specified in Section 2.2-C.1.
7. Full depth security panel shall be provided between drawers when individual drawer locking is required.

#### B. DOORS

1. Doors shall be 11/16" thick particleboard overlaid with a high pressure plastic laminate on both faces to equal 3/4" thickness. Inside color to match cabinet interiors with face color to be selected.
2. Edges are banded with 3mm PVC for 100 and 300 Series and .018" PVC for 200 and 400 Series. Edge colors are chosen from a select range to either complement or match the face color.
3. Hinges are installed as follows:
 

Maximum Door Size	No. of Knuckles	No. of Concealed
24" x 36"	2	2
24" x 48"	2	3
24" x 84"	3	4
24" x 90"	4	5
4. Sliding doors shall be installed on overhead metal track with nylon roller hangers and continuous PVC bottom guide.
5. Stile and rail glass doors shall have 3/4" thick door blank cut to provide 3" wide stiles and rails with tall doors to have rails at mid point. 1/4" Plate glass is fitted into cut-out and stopped with removable PVC stops.

6. Frameless sliding glass doors shall be 1/4" tempered glass with polished edges and fitted with metal bottom channel and nylon rollers.

#### C. CABINET ENDS

1. Semi-exposed ends shall be 3/4" particleboard overlaid with thermofused melamine on both faces.
2. Exposed or finish ends shall be 11/16" thick particleboard overlaid with high pressure plastic laminate on both faces to equal 3/4" thickness. Inside color to match cabinet interiors with face color to be selected.
  - Note to specifier: At additional cost, plastic laminate interiors can be selected for all open cabinets. Same construction as exposed ends with interior face color to be selected.
3. Ends shall be drilled for adjustable shelf supports with 5mm diameter holes on 32mm (1 1/4") centers.
4. Front edge shall be banded with 3mm PVC for 100 and 300 Series and .018" PVC for 200 and 400 Series. Edge colors are chosen from a select range to either complement or match the face color.
5. Top & bottom edges of upper ends shall be banded with .018" PVC.

#### D. CABINET TOPS AND BOTTOMS

1. Semi-exposed tops and bottoms shall be 3/4" particleboard overlaid with thermofused melamine on both faces. Front edge shall be banded with .018" PVC.
2. Exposed or finished tops and bottoms shall be 11/16" thick particleboard overlaid with high pressure plastic laminate on both faces to equal 3/4" thickness. Inside color to match cabinet interiors with exposed color to be selected.
  - Note to specifier: At additional cost plastic laminate interiors can be selected at all open cabinets. Same construction as exposed tops and bottoms with interior face color to be selected.
3. Front edging shall be banded with .018" PVC.

#### E. FIXED AND ADJUSTABLE SHELVES

1. Westmark standard shelf system is designed to support up to 50 lbs. per sq. ft. uniform shelf loading while allowing no more than 2mm (.080") per lineal-foot deflection of unsupported shelf span. Deflection is defined as the measured distance from a straight line that a shelf will deflect under load. Industry standard is L/144" (the length of the shelf divided by 144") as the standard for maximum acceptable shelf deflection. The following materials and thickness shall be used to provide this performance.
  - a. Spans up to 31" long, shall be 3/4" thick particleboard overlaid with thermofused melamine on both faces.
  - b. Spans over 31" up to 41" long, shall be 1" thick particleboard overlaid with thermofused melamine on both faces.
  - c. Spans over 41" up to 48" long, will deflect more than the above allowance if made of 1" thick particleboard. Westmark recommends that 1" plywood core be specified for unsupported spans of this size. Spans over 42" long are not recommended.

- Note to specifier: At additional cost, plastic laminate can be selected at all open cabinets. Shelves shall be the required thickness of particleboard overlaid with color selected high pressure plastic laminate on both faces.
- 2. The front edge only of adjustable shelves inside cabinets shall be banded with .018" PVC.
- Note to specifier: At additional cost, all four edges of adjustable shelves can be banded with .018" PVC.
- 3. Adjustable shelves shall be supported on 4 shelf clips up to 30" deep and 6 shelf clips at 30" deep and over.
- 4. Fixed shelves shall be 3/4" or 1" thick particleboard overlaid with thermofused melamine on both sides. Front edge banded with .018" PVC.
- 5. Adjustable shelves for wall mounted standard shall be 1" thick particleboard overlaid with thermofused melamine on both faces. All four edges are edgebanded with .018" PVC.

#### F. CABINET BACKS

1. Semi-exposed backs shall be 1/2" particleboard with factory applied coating to both faces. Interior face to match cabinet interior color. Semi-exposed edge shall be banded with .018" PVC.
- Note to specifier: At additional cost, plastic laminate interiors can be selected for all open cabinets. Construction shall be 7/16" thick particleboard overlaid with high pressure plastic laminate on both faces equal to 1/2" thickness. Interior color to be selected.
2. Exposed or finish backs shall be 11/16" particleboard overlaid with high pressure plastic laminate on both faces to equal 3/4" thickness. Exterior color to be selected.
3. Removable backs are available at any location for service access as required by project.
4. Bottom edge of upper backs shall be banded with .018" PVC.

#### G. PARTITIONS AND DIVIDERS

1. Vertical 1/2" and 3/4" partitions shall be particleboard overlaid with thermofused melamine on both faces. Exposed edges are banded with .018" PVC.
- Note to specifier: At additional cost, plastic laminate interiors can be selected at all open cabinets. Partitions shall be required thickness of particleboard overlaid with color selected high pressure plastic laminate on both faces.
2. Small dividers shall be 1/4" tempered hardboard and supported by adjustable clips or grooved into adjacent members. Edges are sanded.
- Note to specifier: At additional cost, 1/4" thick acrylic material can be selected for small dividers. Colors available are clear, bronze, and smoke with exposed edges flame polished.

#### H. CABINET BASES

1. Cabinet bases shall be 4" standard height made in continuous lengths to insure straight, level and true line of casework. Core material is 3/4" particleboard unless specified otherwise. Bases are unfinished ready for scheduled finish to be applied.
2. Free standing cabinet shall have unit bases with cabinet ends running to the floor.
- Note to specifier: At additional cost cabinet base material can be specified to be 3/4" thick exterior plywood when wet floor conditions are anticipated.

#### I. FILLERS AND SOFFIT PANELS

1. Panels shall be made of 11/16" particleboard overlaid with high pressure plastic laminate on both faces to equal 3/4" thick and shall be fitted to adjacent surfaces.
2. Exposed faces shall have laminate matching to adjacent cabinets.

#### J. COUNTERTOPS

##### 1. Decorative Laminate Countertops

- a. Decorative laminate countertops shall be GP50 NEMA grade laminate with .020" backing sheet bonded to 3/4" particleboard substrate. Adhesives shall be either Type III PVA or contact cement depending on material size and job conditions. Decorative laminate color selections to be as specified or from manufacturer's standard offering.
- Note to specifier: At additional cost, 3/4" thick water resistant MDF can be selected for countertop substrate. This provides additional resistance to moisture for very wet applications.
- b. Finished edges shall be trimmed with GP50 grade laminate applied after the top surface. Overall thicknesses available are 1" to 1 1/2" with build-up added to the substrate.
- Note to specifier: At additional costs, the following edge options are available.
  1. Laminate edges can be applied before top surface is applied. This method complies with AWI Premium grade.
  2. 3mm PVC can be provided at front and return edges. PVC is applied after top surface is applied.
  3. 90° and 180° Formed front edges can be provided. They are formed to a 3/4" radius over core material.
  4. 3/4" Thick hardwood can be provided at front and return edges. Hardwood is trimmed flush with the face surface. (Verify wood species.)
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. Material and color to be the same as countertop deck. Backsplashes shall be factory assembled with waterproof sealant and #6 x 2" screws at 6" on center.
- d. Countertops shall be furnished in longest possible lengths. When joints are required they shall be factory prepared with a minimum of four 1/4" joint bolts each. Joints shall be field assembled with waterproof sealant to insure stable and rigid construction. No joints allowed within 24" of sinks, counter ends, or kneespace areas.

## 2. Post Forming Decorative Laminate Countertops

- a. Post formed countertops shall be PF42 NEMA grade laminate with .020" backing sheet bonded to 3/4" particleboard substrate. This laminate is heated to 325° Fahrenheit and then wrapped around substrate as designed. Formed edges and coved backsplashes can be done only in straight lines with contact adhesive. Laminate color selection to be as specified or from manufacturer's standard offerings.
  - Note to specifier: At additional cost, 3/4" thick water resistant MDF can be selected for countertop substrate. This provides additional resistance to moisture for very wet applications.
- b. Overall thicknesses available are 1" to 1 1/2" with build-up added to the substrate.
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. Material and color to be the same as countertop deck. Backsplashes shall be coved with 3/16" radius and butt jointed end splashes.
- d. Countertops shall be furnished in longest possible lengths. When joints are required they shall be factory prepared with a minimum of four 1/4" joint bolts each. Joints shall be field assembled with waterproof sealant to insure stable and rigid construction. No joints allowed within 24" of sinks, counter ends, or kneespace areas.

## 3. Acid Resistant Laminate Countertops

- a. Acid resistant laminate countertops shall comply with NEMA standards and provide chemical resistance at considerable savings to other options. Acid resistant laminate is recommended as an intermediate laboratory surfacing material, see test data available from laminate manufacture. Laminate with .020" backing sheet is bonded to 3/4" particleboard substrate. Adhesives shall be either Type III PVA or contact cement depending on material size and job conditions. Laminate color selection to be as specified or from manufacturer's standard offerings.
  - Note to specifier: At additional cost, 3/4" thick water resistant MDF can be selected for countertop substrate. This provides additional resistance to moisture for very wet applications.
- b. Finished edges shall be trimmed with acid resistant grade laminate applied after the top surface is applied. Overall thicknesses available are 1" to 1 1/2" with build-up added to the substrate.
  - Note to specifier: At additional cost, finished edges can be trimmed before the top laminate is applied. This method complies with AWI Premium Grade.
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. Material and color to be the same as countertop deck. Backsplashes shall be factory assembled.
  - Note to specifier: At additional cost, coved backsplashes with 3/16" radius and butt jointed end splashes are available.
- d. Countertops shall be furnished in longest possible lengths. When joints are required they shall be factory prepared with a minimum of four 1/4" joint bolts each. Joints shall be field assembled with waterproof sealant to insure stable and rigid construction. No joints allowed within 24" of sinks, counter ends, or kneespace areas.

## 4. Solid Surfacing Countertops

- a. Solid surfacing countertops are a blending of practical attributes like durability, easy care and outstanding stain resistance that has proven to be tough and versatile. Many new colors and textures are available for all applications. The cost can be up to 10 times more than decorative laminate countertop materials.
- b. Solid surfacing countertops are constructed from non-porous composite resin sheets custom fabricated to the specified thickness and design. Westmark is trained to work with all major solid surfacing products like Corian®, Avonite®, Fountainhead®, Gibraltar®, and Surell®.
- c. Finished edges are constructed from layers of solid surfacing material laminated together to form desired thickness. Overall thicknesses available are 3/4" to 1 1/2".
- d. Backsplashes shall be 1/2" thick and 4" high unless otherwise specified. Material and color to be the same as countertop deck. Backsplashes shall be field assembled with waterproof sealant.
- e. Countertops shall be furnished in longest possible lengths. When joints are required they shall be field done with matching epoxy resin to create an almost invisible joint line.

## 5. Epoxy Resin Countertops

- a. Epoxy resin countertops are the most durable, stain resistant, and heat resistant top available for laboratories. Tops shall be monolithic and molded from a modified epoxy resin. Tops shall have a smooth, nonglare finish with thickness tolerance not to exceed plus or minus 1/32".
- b. Exposed edges shall be finished with 1/8" chamfer and drip grooves on underside. Overall thicknesses available are 3/4" to 1 1/4".
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. They shall be of the same material and finish as the work surface. Backsplashes are supplied loose for field application to assure a proper fit to walls.
  - Note to specifier: At additional cost, integral coved backsplashes are available. Integral backsplashes are 3/4" thick with 5/8" cove radius.
- d. Epoxy countertops shall be furnished in lengths up to 96" long. When joints are required they shall be field done by allowing a 1/16" wide gap between sections and then filing and flushing with matching epoxy adhesive. Countertops shall be attached to cabinets with epoxy adhesive no more than 48" on center.
- e. Where epoxy resin sinks are furnished, provide drop-in type sinks. Secure sink with epoxy adhesive around entire sink perimeter.

## 6. Stainless Steel Countertops

- a. Stainless steel shall be 16 gauge, type 304 or type 316 with No. 4 satin finish unless otherwise specified. Type 304 is the most economical for general purpose stainless steel tops. Type 316 offers all the attributes of type 304 except it will provide a greater degree of corrosion resistance for laboratory use.

- b. Finish edges shall be bent around and returned 1/2" under substrate with overall thicknesses of 3/4" to 1 1/2" available. A solid 3/4" plywood core shall be bonded to the underside of steel for rigidity and sound deadening. A raised marine edge is available at the perimeter of the countertop when specified.
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. They shall be formed and coved to be integral with the deck surface.
- d. Countertops shall be furnished in longest possible lengths. Shop joints shall be electronically welded ground smooth, and polished to become practically invisible. Field joints shall be hairline butt joints mechanically bolted through continuous channels welded to the underside at edges. Field joints shall be kept to a minimum.

#### 7. Sheet Metal Countertops

- a. Sheet metal countertops shall be 18 gauge galvanized sheet metal. This top is suited for shop applications where hard physical use is to be demanded of the countertops.
- b. Finish edges shall be bent around and returned 1/2" under substrate with overall thicknesses of 3/4" to 1 1/2" available. A solid 3/4" plywood core is bonded to the underside of steel for rigidity and sound deadening.
- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. They are formed and coved to be integral with deck surface.
- d. Countertops shall be furnished in longest possible lengths. Shop joints shall be welded, ground smooth, and coated with cold galv. Field joints shall be hairline butt joints mechanically bolted through continuous channels welded to underside at edge. Field joints shall be kept at a minimum.

#### 8. Hardboard Countertops

- a. Hardboard countertops shall be surfaced with 1/4" thick tempered hardboard bonded to 3/4" particleboard and balanced with .020" backing sheet. Adhesive shall be Type III PVA.
- b. Exposed edges are finished with 1/4" tempered hardboard and corners trimmed to a 1/8" radius. Overall thicknesses available are 1" to 1 1/2".
- c. Backsplashes shall be 1" thick and 4" high unless otherwise specified. Material shall be the same as the countertop deck and factory assembled with waterproof sealant and #6 x 2" screws at 6" on center.
- d. Countertops shall be furnished in longest possible lengths. When joints are required, they shall be factory prepared with a minimum of four 1/4" joint bolts each. Joints shall be field assembled with waterproof sealant to insure stable and rigid construction.

#### 9. Laminated Hardwood Countertops

- a. Laminated maple countertops shall be manufactured with 1 1/4" strips of maple kiln dried to 8% moisture content, machined, and electronically glued to form top. Each top to be sanded to a final grit of #200 and sealed with specified finish to all faces and edges.
- b. Finished edges to have corners eased to 1/8" radius. Overall countertop thicknesses available are 1 1/2" to 2 1/4".

- c. Backsplashes shall be 3/4" thick and 4" high unless otherwise specified. Material shall be solid, kiln dried maple.
- d. Countertops shall be furnished in the longest possible lengths.

### 3.2 CABINET JOINERY

#### A. CABINET CONSTRUCTION

- 1. Cabinet parts are assembled with one or more of the following methods:  
Tongue and groove joints, wood dowels, Type III adhesive, screws and staples. Units are squared and clamped to insure strong joint assembly.
- 2. Cabinet backs are applied with staples and screws to provide a strong and square cabinet assembly.
- 3. All hardware shall be securely screwed or press fitted into pre-drilled holes.

#### B. MOBILE CABINET CONSTRUCTION

- 1. Mobile cabinet parts are assembled with tongue and groove joinery, Type II adhesive and steel frames. The frames are securely screwed into the cabinet parts for strength and to minimize racking. Casters are bolted to the bottom frame.

### 3.3 WORKMANSHIP

#### A. CASEWORK COMPONENTS

- 1. All components shall be accurately cut, edgebanded, machined and processed to meet standards as set forth by AWI. and WIC.
- 2. Cabinet Assembly
  - a. All components shall be neatly assembled and clamped together with Type II adhesive, wood dowels, screws, staples and other fasteners to form a complete system.
  - b. Complete cabinets shall be square, plumb and true.
  - c. All units are to be labeled with project name, model number, room number location and item number for easy identification by the job-site installers.

## PART 4 INSTALLATION

### 4.1 STORAGE AND PROTECTION

- A. Casework is to be protected and stored under cover in a ventilated building not exposed to extreme temperatures or humidity. Do not store casework in areas with wet concrete, masonry or plaster.

### 4.2 WORKERS

- A. Install casework with factory trained finish carpenters under direct supervision of manufacturer's representative.

### 4.3 ATTACHMENT

- A. All casework items shall be securely anchored to building structure, except for those items identified as "mobile" or "moveable" on drawings, which are to be adjusted to prevent any rocking when sitting on finish floor.
- B. Primary anchorage of base and wall cabinets shall be through the 1/2" thick cabinet back into wall framing or blocking furnished under other sections. Additional anchorage will be made into cabinet bases and adjacent side walls where they occur. Appropriate sized anchor screws shall be used to best attach to the existing wall condition which will allow each cabinet to be loaded to a capacity of 50 lb. per sq. ft. of shelf area.
- C. For schools, hospitals and public buildings, all installations shall be in strict conformance with seismic codes.
- D. At free-spanning countertops or work surfaces, steel support brackets shall be provided at a maximum spacing of 32 inches, or as shown on drawings. Support brackets are to be designed to allow for knee space clearance and attach to wall framing for support.

### 4.4 WORKMANSHIP

- A. Erect casework straight, level, plumb and true.
- B. Neatly scribe casework to walls, soffits and columns. Fillers to color match adjacent surfaces and will not be permitted in excess of 1 1/2" wide, unless specifically requested otherwise.
- C. Joints are not permitted in continuous countertops over knee spaces or within 24 inches of sinks or counter ends. Joints, where approved, are to be tight, in perfect alignment, and not allowing excessive deflection.

### 4.5 COORDINATION

- A. Verify requirements and location from architect before cutting holes for paper slots and grommets.
- B. Provide cutting and fitting as necessary to accommodate mechanical and electrical work built into casework units.
- C. Provide alterations to casework to keep devices accessible when they are covered by casework. This includes mechanical and electrical switches, receptacles, panels, access doors and other devices.

### 4.6 ADJUSTING AND CLEANING

- A. Adjust doors, hardware fittings, and other moving or operating parts to function smoothly and correctly.
- B. Broom clean all work installed in this section inside and exposed outer surfaces. Remove from site, all trash, packing material, material scraps and other debris related to the work of this section.
- C. Touch up abraded factory-finished surfaces to match original finish.