DIVISION VI - WOOD AND PLASTIC

SECTION 06112 - FRAMING AND SHEATHING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Structural wall, and roof framing.
B. Wall and roof sheathing.

1.02 REFERENCES

A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
B. ANSI A135.4 - Basic Hardwood.
C. ANSI A208.1 - Mat Formed Wood Particleboard.
D. APA - American Plywood Association.
E. AWPA - American Wood Preservers' Association: Book of Standards.
F. FS-TT-W-571 - Wood Preservation: Treating Practices.
G. NFPA - National Forest Products Association.
H. SFPA - Southern Forest Products Association.
I. WCLIB - West Coast Lumber Inspection Bureau: Standard Grading Rules for West Coast Lumber.
J. WWPA - Western Wood Products Association.

1.03 QUALITY ASSURANCE

A. Lumber Grading Agency: Certified by ALSC.
B. Plywood Grading Agency: Certified by APA.

1.04 REGULATORY REQUIREMENTS

A. Conform to UL requirements to achieve rating indicated.

1.05 SUBMITTALS

A. Submit product data under provisions of Section 013400.
B. Provide technical data on wood preservative materials and application instructions.
C. In lieu of grade stamping exposed-to-view lumber and plywood, submit manufacturer's certificate under provisions that products meet or exceed specified requirements.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store and protect products under provisions of Section 01600.

PART 2 - PRODUCTS

2.01 LUMBER MATERIALS

A. Lumber Grading Rules: NFPA, RIS, SFPA, WCLIB, WWPA.

B. Beam Framing: species: Pine, Southern Yellow, grade - #2, 19 percent maximum moisture content.

C. Joist Framing: species: Pine, Southern Yellow; grade #2, 19 percent maximum moisture content.

D. Rafter Framing: species: Pine, Southern Yellow; #2 grade, 19 percent maximum moisture content.

E. Non-structural Light Framing: species: Pine, Southern Yellow; #2 grade, 19 percent maximum moisture content.

F. Studding: species: Pine, Southern Yellow, #2 grade, size: 2x4, 2x6 or as noted; 19 percent maximum moisture content @ 16" o.c. maximum.

G. Boards, Pine, Southern Yellow #2 grade at 16" on center maximum.

2.02 PLYWOOD MATERIALS

A. Roof Sheathing: APA Structural I, 19/32" x 4' x 8 SYP, CDX sanded.

B. Provide 4' x 4' fire-treated plywood in the Mechanical Room for attaching Data and Communication Equipment.

2.03 OSB MATERIALS

A. Wall Sheathing: ANSI A208.1 wood 7/16" x 4' x 8' OSB.

2.04 ACCESSORIES

A. Fasteners: galvanized steel for exterior, high humidity, and treated wood locations; plain finish elsewhere; size and type to suit condition.

B. Joist Hangers: Galvanized steel, sized to suit joists and framing conditions.

C. Sill Gasket: 1/4" thick, closed cell, polyethylene foam from continuous rolls, glass fiber strip.

2.05 WOOD TREATMENT

A. Wood Preservative (Pressure Treatment): FS TT-W-571, AWPA Treatment C2 using water borne preservative with 0.30 percent retainage on all wood in contact with concrete.

PART 3 - EXECUTION

3.01 FRAMING

A. Erect wood framing members level and plumb.
B. Place horizontal members laid flat, crown side up.
C. Construct framing members full length without splices.
D. Double members at openings over one sq. ft. (0.1 sq.m.). Space short studs over and under opening to stud spacing.
E. Construct double joist headers at floor and ceiling openings. Frame rigidly into joists.
F. Construct double joists under wall studding.
G. Bridge joists in excess of 8 feet span. Fit solid blocking at ends of members.
H. Place full width continuous sill flashings under framed walls on cementitious foundations. Lap flashing joint 4 inches.
I. Place sill gasket directly on sill flashing, cementitious foundation. Puncture gasket clean and fit tight to protruding foundation anchor bolts.

3.02 SHEATHING

A. Secure roof sheathing perpendicular to framing members with ends staggered. Secure sheet edges over firm bearing. Use sheathing clips between sheets between roof framing members.

B. Secure wall sheathing horizontally perpendicular to wall studs, with ends staggered over firm bearing.

3.03 TOLERANCES

A. Framing Members: 1/4 inch maximum from true position.
B. Surface Flatness of Floor: 1/4 inch in 10 feet maximum

END OF SECTION

SECTION 06192 - WOOD TRUSSES

PART 1 - GENERAL

SUMMARY

Provide prefabricated and pre-engineered wood trusses:

1. Gable-shaped trusses.
2. Hip and girder trusses at hip ends of roof.
3. Monopitch trusses.

1.01 SUBMITTALS

A. Submit for approval shop drawings, product data.

QUALITY ASSURANCE

Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

A. Standards: TPI, Design Specification for Metal Plate Connected Wood Trusses; TPI, Design Specification for Metal Plate Connected Parallel Chord Wood Trusses.

B. Design Engineering: Registered Engineer.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Wood Trusses:

1. Lumber Standard: PS 20 American Softwood Lumber Standard.
2. Dressing: Dressed four sides.
3. Moisture Content: Seasoned, 19 percent maximum.

B. Connectors, Fasteners, and Metal Framing Anchors:

1. Connectors: Hot-dip galvanized steel sheet, ASTM A 446, Grade A; ASTM A 525, G60.

2. Connectors: Electrolytic zinc-coated steel sheet, ASTM A 446, Grade A; ASTM A 591, Coating Class C.

3. Connectors: Aluminum-zinc, alloy-coated steel sheet, ASTM A 446, Grade A; ASTM A 792, Coating Designation AZ 50.

4. Connectors: Stainless steel sheet, ASTM A 446, Grade A; ASTM A 167, Type 304.

5. Nails, Wire, Brads, and Staples: FS FF-N-105.

6. Power Driven Fasteners: National Evaluation Report NER-272.

7. Wood Screws: ANSI B18.6.1.

8. Lag Bolts: ANSI B18.2.1.

9. Bolts: ASTM A 307, Grade A; ASTM A 563.

10. Metal Framing Anchors: Hot-dip galvanized steel sheet, ASTM A 446, Grade A; ASTM A 525, G60.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Comply with recommendations of TPI Design Specifications for Metal Plate Connected Wood Trusses.

B. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with work of other sections.

C. Restore damaged components. Clean and protect work from damage.

D. Attach all Wood Roof Trusses at all top plates with Simpson H5 connection.

END OF SECTION

SECTION 06200 - FINISH CARPENTRY AND MILLWORK

PART 1 - SCOPE

A. This Section includes all labor, materials, equipment and related items required to complete the work of finish carpentry and millwork as shown on the Drawings and specified herein.

PART 2 - MATERIALS

A. Lumber Standards and Grade-Marking. Each piece of lumber and each board, exclusive of mouldings and trim, shall comply with Product Standard PS-20, latest edition, and with specific grading requirements of the association recognized as covering the species used and under whose grading rule it is produced. Each piece of lumber and each board shall be identified by the grademark of a recognized association or independent inspection agency. Such association or independent inspection agency shall be certified by the Board of Review, American Lumber Standards Committee, Washington, D.C., to grade the species.

B. Mouldings and trim shall conform to details on the Drawings. However, stock mouldings and trim of same sizes and with approximately the same profiles as those detailed may be used if all other requirements are met, subject to approval by the Architect.

C. Plywood shall be softwood plywood, unless otherwise specified under individual item specifications, and shall conform to requirements of "Product Standard PS-1, latest edition, for American Plywood Association." Plywoods for particular applications in this project shall be as specified under Art.3, below.

1. Each standard size panel shall be stamped or branded to show group, type and grade.

D. Moisture content of various materials shall meet the following requirements at time of installation:

1. Boards:

   a. 8" or less in width — Not more than 19%

   b. Wider than 8" — Not more than 15%

2. Finish Lumber and Millwork — Not more than 12%

E. Dressed lumber shall be surfaced four sides (S4S) to conform to Product Standard PS-20 unless, in addition to being dressed, it has been notched, shiplapped or patterned.

F. Dimensions of lumber specified or called for by the Drawings are nominal, except that trim dimensions shown are actual.

PART 3 - GRADES AND SPECIES

A. Exterior wood trim 2" or greater nominal thickness and 2" or greater nominal width shall be of sizes and profiles shown on the Drawings, shall be S4S, and shall be one of the following species, provided the grade for each is not lower than the minimum shown.

Fir, Douglas, WCLB Rules	"A" - Appearance Framing
Pine, Southern Yellow, SPIB Rules	"A" - Appearance Framing

At the Contractor's option, other specie of comparable appearance grade may be used in lieu of the above, if approved by the Architect. Running lengths of 10' or less in all applications shall be in single pieces.

B. Exterior wood trim 2" or less nominal thickness shall be of sizes and profiles shown on the Drawings, shall be S4S, shall be same specie specified above for 2" or greater exterior trim, and shall be one of the following, provided the grade for each is not lower than the minimum shown:

Fir, Douglas, WCLB Rules	Select Merchantable Boards
Pine, Southern Yellow, SPIB Rules	No. 1 Boards

At the Contractor's option, other specie of comparable appearance grade may be used in lieu of the above, if approved by the Architect. Running lengths of 10' or less in all applications shall be in single pieces.

C. Exterior and interior miscellaneous trim, door and fixed window frames, etc., may be one of the following species, provided the grade for each is not lower than the minimum shown:

Fir, Douglas, WCLB Rules	"D" Finish
Pine, Southern Yellow, SPIB Rules	"C" Finish

At the Contractor's option, other specie of comparable appearance grade maybe used in lieu of the above, if approved by the Architect. Running lengths of 10' or less in all applications shall be in single pieces and may be finger-jointed.

D. Plywoods shall be of the types and minimum grades specified hereunder for specific applications listed. All plywoods shall be from Group 1 Species as listed by the American Plywood Association.

E. Rough hardware needed for the proper installation of all finish carpentry and millwork shall be provided. Nails, screws, bolts and similar items shall be of proper types and ample sizes to fasten and hold the various members and items securely in place.

F. Other materials shall be as specified hereunder.

PART 4 - STORAGE AND PROTECTION

A. All lumber shall be piled in a manner which ensures proper ventilation and drainage, and shall be covered to protect it from the elements.

B. Millwork and wood trim shall be protected against dampness during and after delivery. It shall be stored in well-ventilated buildings and where not exposed to extreme changes in temperature or humidity. Wood doors shall be stored in flat positions, one above another on solid, level supports, with air circulation excluded from top and bottom surfaces.

C. Improper storage resulting in damage to millwork or trim, or warping of doors, shall be cause for their rejection.

PART 5 - GENERAL

A. Finish Carpentry. Work of finish carpentry shall be laid out as shown on the Drawings, and shall be cut and fitted as necessitated by conditions encountered. All work shall be plumbed, leveled, and properly jointed and secured with sufficient nails, screws, bolts, etc. to ensure proper alignment and rigidity.

B. Any piece of wood or other material with a defect or defects that prevent it from serving its intended purpose satisfactorily, including warped, split, or otherwise defective material, will be rejected and shall be replace with an acceptable piece.

PART 6 - EXTERIOR AND INTERIOR TRIM

A. Miscellaneous exterior and interior softwood trim, including fascias, mouldings, casings, etc., shall be of species and grades hereinbefore specified, as approved by the Architect and shall be furnished in longest practicable lengths.

B. Joints in all work shall be tight and formed to conceal shrinkage. Door and window trim shall be in long lengths and jointed only where solid fastenings can be made. End joints in all built-up members shall be well distributed so that no joint occurs over another. External and internal corners shall be mitered. Where necessary, woodwork shall be scribed to adjacent work.

1. Joints in running trim, including continuous wood fascia members, shall be scarfed at 45 degrees, except where butt joints may be specifically permitted by the Architect, and shall be drawn up tightly for inconspicuous joints. External exposed corners of trim shall be mitered.

End of Section

SECTION 06400 - PLASTIC LAMINATE CASEWORK AND COUNTERTOPS

PART 1 - DESCRIPTION

A. Furnish and install plastic laminate casework and countertops as shown on the drawings and specified herein.

B. Work included:

1. Casework - plastic laminate faced.
2. Plastic laminate covered countertops for wood and laminate casework.
3. Plastic laminate covered shelves.
4. Standard hardware and accessories.
5. Plastic laminate window stools throughout building at exterior windows as detailed.

C. Related work specified elsewhere:

1. Rough carpentry: Section 6100
2. Finish carpentry: Section 6200
3. Gypsum Drywall: Section 9250
4. Resilient base: Section 9650
5. Mechanical work: Division 15
6. Electrical work: Division 16
7. Metal casework: Section 11600

PART 2 - QUALITY ASSURANCE

A. Custom plastic laminate faced casework shall match in design, material, finish and detail the stock plastic laminated casework. The materials, workmanship and installation of all casework provided under this section shall be the responsibility of this contractor.

1. The contractor providing the work described herein, may be a custom casework contractor with a casework manufacturer as a subcontractor/supplier; or a stock casework with a custom casework manufacturer as a subcontractor/supplier.

B. Any casework manufacturers requesting approval shall provide to architect, all information and specifications of the products they wish to use in bidding, ten days prior to bid date. Approval will be contingent upon whether the products meet the required specifications.

C. The architect reserves the right to disapprove any subcontracting fabricator proposed for this project. The casework contractor shall submit to the architect, prior to fabrication, a letter signed by a responsible officer of the fabricator indicating satisfactory evidence of having completed comparable work for the past five years on similar projects utilizing equipment, methods and workmanship meeting the standards specified in this section.

D. If requested by the architect, manufacturers requesting approval shall submit full size production line samples of the following units at least ten days prior to bid opening.

1. One cabinet base unit, 36" wide with door and drawer, complete with laminate top to fit.

E. Reference standards:

1. Architectural Woodworking Institute (AWI) "Quality Standards".
2. National Electrical Manufacturers Association (NEMA) "LD 1 thru LD3" High Pressure Decorative Laminates.
3. Federal Specifications (FS) "LLL-H-00810: Building Board (Hardboard), Hard Pressed, Vegetable Fiber".
4. American National Standard (ANSI) A208.1-79 "Mat-Formed Wood Particleboard".
5. Commercial Standards (CS) "C.S. 35: Adhesives".

PART 3 - SUBMITTALS

A. Certifications: Letter of subcontractors qualifications and experience within the past five years and references of work completed.

B. Color Selection: Complete range of color, textures and patterns of the proposed plastic laminate manufacturer, based upon the preliminary color selections listed hereinafter, with architect's approval. Final approval shall be contingent upon providing colors, textures and patterns matching preliminary selections.

C. Shop Drawings: Submit shop drawings of items specified herein. Indicate: plan views, elevations, sections and details of each item; location in the building of each item; conditions in relation to adjacent materials and construction; methods of assembling sections; location and installation requirement size(s); shape and thickness of materials, joints and notations of special features; sink locations; and drawings required to illustrate deviations from the contract requirements.

D. Rough in drawings: submit separate utility rough in drawings which indicate points of connection to each utility involved. Reference dimensions from building components.

PART 4 - PRODUCTS DELIVERY, HANDLING AND STORAGE

A. Schedule casework for fabrication and delivery to avoid delay in work progress. Delivery to job site shall not be earlier than one month before casework can be installed. Verify delivery date with general trades contractor.

B. Receive, unload, check, store, protect and distribute materials specified in this section.

C. Store materials to maintain the moisture content of the wood members between 6% and 15%. Store in areas or rooms with temperatures at 70°F ± 10°F.

D. Store under cover in a ventilated building not exposed to extreme temperature and humidity changes. Do not store or install casework until concrete, masonry and plaster work is dry.

PART 5 - JOB CONDITIONS

A. Prior to fabrications of items of casework which are dependent upon building dimensions, take accurate field measurements of location of walls, drop soffits, columns, piers and other applicable building elements. Major discrepancies between dimensions given on the drawings and field dimensions shall be brought to the attention of the general trades contractor. Compensate for minor dimensional changes so that fabricated items can be delivered to the job, and can be scribed to fit properly.

B. In no instance shall any casework be stored or installed in any area unless the area is broom clean, closed in and possessing a relative humidity below 50% at 70°F.

PART 6 - WARRANTY

A. Warranty in writing that defects due to use of improper materials or workmanship in casework provided under this contract for the period of one year from the date of substantial completion of the work, shall be rectified promptly by the casework contractor at his own expense upon notification of condition.

PART 7 - GENERAL

A. Casework, both stock and custom shall be plastic laminate construction consisting of high pressure decorative laminate bonded to 3/4" thick particle board.

1. Fabrication shall comply with applicable requirements for "Custom grade" as indicated in Section 400 of the AWI architectural woodwork quality standards and guide specifications.

B. Cabinet units shall be assembled at the mill, insofar as access openings to installation location will permit. Where items must be built into sections, design the units so they can be assembled at the site into one integral item, with exposed joints flush, tight and uniform. Similar adjoining doors and drawers shall be in alignment and each door and drawer shall operate smoothly, without bind or excessive play.

C. Casework units shall be complete with bases, shelves, counter and work tops, finish and operating hardware, drawer accessories and miscellaneous accessories as indicated on the drawings and specified herein.

D. Coordination work:

1. Division 9: Provide physical openings for recessed casework.

2. Section 6100: Provide grounds and blocking necessary for attachment and support of wallmounted casework.

3. Plumbing Prime Contractor: provide lay-in sinks, faucets and fittings; templates for cutouts for installation; provide supply and waste lines including traps to rough in points based on information supplied by the casework contractor; and provide final connections.

   a. Division 15: Provide stainless steel sinks with integral with tops and backsplashes, include tailpieces, drains and strainers.

4. Electrical prime contractor: provide electrical fixtures and equipment noted on drawings including related boxes, conduit and conductors. Provide electrical components complete, terminating through the back of the casework unit either with a junction box or a 2" conduit stub. Allow conductors to protrude 8" to permit final connection by Division 16.

5. Division 16: Locate rough-ins based on information given on casework rough-in drawings and be responsible for work necessary to make final connections.

6. Division 9650: Apply resilient base to casework after casework has been installed.

7. Division 5500: Provide steel support braces.

E. Definitions shall conform to the following:

1. Exposed portions are those visible from a normal point of view when doors and drawers are closed. Interiors of open cabinets, and open shelving are considered exposed.

2. Semi-exposed portions are those areas not considered exposed, but which are visible from a normal point of view when solid doors and drawers are open. Backs of hinged doors, drawer parts except the exposed exterior front, and shelving in the storage areas are considered semiexposed.

3. Concealed portions include sleepers, web frames, dust panels and other surfaces not visible after installation.

PART 8 - MATERIALS

A. Particle board: 45 lbs. Minimum density and of balance construction, with moisture content less than 8%. Particle board shall conform to ANSI A208.1 and meet or exceed CS-236-66, FS LLL-B-800A and ASTM D1037-78.

1. Surfaces shall be smooth with all chips, shavings or flakes well scoured so that there shall be no visible telegraphing of the core face through the plastic laminate.

2. Square and rectangular cutouts shall have radiused corners not less than ½".

3. At cut edges, exposed or not and where cutouts occur, the edges shall be completely sealed to prevent moisture absorption. Cutouts for pipes shall be round.

4. Meet the following performance requirements: Submit compliance date from the manufacturer prior to fabrication.

   a. Screw holding face: 371 lbs.
   b. Modulus of rupture: 2400 psi
   c. Modulus of elasticity: 450,000 psi
   d. Internal bond: 90 psi
   e. Surface hardware: 90 psi

B. Edging: Flat edge design for cabinet body in color matched laminate or PVC. Color as selected by architect.

C. Plastic Laminate: High pressure decorative laminate surfacing material meeting the minimum NEMA Standards for abrasion resistance, heat resistance, stain resistance, moisture resistance, dimensional stability and general rules for fabrication and installation.

1. Plastic laminate materials shall be as selected by the Architect from full product line of national manufacturers such as Formica, Wilsonart, Pionite, Nevamar and Arborite.

2. Exposed horizontal work surfaces: NEMA GP50, PF (Post-forming) satin surface.

3. Exposed vertical work surfaces: NEMA GP 28 laminate.

4. Semiexposed surfaces: 10 mil polyester laminate in conformance to ASTM D1300, factory bonded at 200 psi at 300°F, minimum. Color shall be manufacturers white.

5. Backing sheet: NEMA BK20 and shall be used where laminate covered work is not restrained from warping or twisting by the method of attachment or by supports. Minimum standard of AWI Custom work shall apply.

6. Bonding adhesive: Water resistant type and as recommended by the approved plastic laminate manufacturer. Plastic laminate shall be applied to the core in the shop, using commercial methods, application and presses.

7. Sealant used for sealing particle board or plywood edges shall be HYBOND 80 by Pierce Stevens Corporation.

D. Assembly adhesives used in assembly, installation and other applications, shall be one of the following:

1. HYBOND 80
2. HYBOND WHITE
3. CANPLAST 100

E. Provide hardware as follows: This is not intended to be a complete listing, but as a guide to establish quality:

1. Hinges shall be cast steel cup and hinge concealed hinges #75M5550 by BLUM

   a. Hinges shall have independent three way adjustment of doors.

   b. One pair of hinges per door of 30" or less, one and one half pair of hinges per door of 48" and one hinge for every 12" of door over 48".

c. Each hinge shall be removable by means of a clip mechanism lever attached to the hinge.

d. Hinges shall be mounted into corresponding hinge plates.

e. Hinges shall have 125 ° free movement of swing and be self closing within two inches of close.

f. Hinges shall have a lifetime warranty against defects from workmanship and materials.

g. Hinges shall be installed into door panels by means of a pre-drilled hole and press fitted into panel substrate.

2. Pulls for all doors and drawer fronts shall be manufacturers standard bent wire pull, brushed chrome finish, three inch centers. Nomenclature for this ABP865-26D by AMEROCK.

3. Drawer slides shall be side mounted, bottom supported, 4 point suspension slides with nylon roller bearing and epoxy coating.

4. All file drawers shall have either Pendaflex or file followers.

5. All shelf clips shall be BLUM nylon covered steel pin (5mm) that will mount into pre-drilled end panels for a support of at least 250 lbs.

6. Locks, noted on drawings, shall be cam tumbler by NATIONAL LOCK.

7. Clothes rods and mounting flanges shall be Knape-Voght #770 and #734.

8. Optional sliding doors are mounted on steel tracks and use ball bearing sheaves mounted in the doors.

9. Grommets shall be spring loaded closure type in assorted sizes.

PART 9 - CONSTRUCTION

A. All cabinets shall be of 3/4" thick MCP by Domtar, finished ends and dowel pinned to tops, bottoms or backs, shall be laminated with plastic laminate and edged with matching PVC.

1. End panels shall consist of a single panel of MCP drilled and dowel pinned to tops, bottoms or braces by way of fluted hardwood dowel pins nested in white glue.

2. All cabinet boxes shall be case clamped for a minimum of seven minutes in a Holzer case clamp to insure squareness.

3. End panels shall be drilled for shelves, bottoms, tops and braces using the 32mm drilling system. All components will be drilled in corresponding patterns.

4. End panels shall be rabbited at the rear for acceptance of 3/8" thick MCP back. The back will be mounted using mechanical fasteners. The back shall be removable.

5. End panels shall have integral toe kicks and shall have a front of 3/4" MCP mechanically fastened to the end panels.

B. Doors shall be of 11/16" thick laminated panel products with the front face laminated in the architects color selection. The semi-exposed side shall be covered by white HPL plastic laminate. The edges shall be covered by PVC or self-edged.

C. Drawers shall be constructed of 1/2" thick MCP, rabbited, glued and mechanically fastened for a strong bond. Bottoms shall be of 3/8" thick MCP mechanically fastened to the drawer box frame. Top edges shall be covered in white PVC edging. Drawer fronts are same construction as doors. Drawer fronts shall be removable from drawer box for easy alignment. Drawers shall have epoxy coated, nylon roller bearing, side mounted, bottom supported slides by BLUM.

D. Shelves shall be of 3/4" thick MCP and edged with matching PVC edging. Shelves shall not be constructed over 42" in length.

E. Braces shall be of 3/4" thick MCP and shall span the width of the cabinet box. Braces shall be edged on visible sides with PVC edging. On sink or range base cabinets the front brace shall be mounted vertically and shall be laminated to match the cabinet exterior.

F. Backs shall be of 3/8" thick MCP and be rabbited in and mechanically fastened to the end panels.

G. Wall cabinets shall be of 3/4" thick MCP and shall be dowel pinned in the same manner as the bases. Wall backs are 3/8" thick rabbited and mechanically fastened to end panels.

H. Finished backs shall be of 3/4" MCP laminated with plastic laminate on face and edged with PVC.

I. Top supports shall be of 3/4" MCP laminated on both sides and edged with PVC or plastic laminate.

PART 10 - COUNTERTOPS

A. Countertops and backsplash shall be custom made with square, self-edge and shall be constructed of 3/4" thick medium density fiberboard (MDF) or 45# density particleboard (CS 236-66: Type 1, Grade B, Class 2) covered on all exposed surfaces with horizontal grade 10/HGS, .050" thickness, high pressure laminate as manufactured by a nationally known laminate company.

1. Colors and patterns of plastic laminate shall be as selected by the Architect from full product line of national manufacturers such as Formica, Wilsonart, Pionite, Nevamar and Arborite.
2. Provide cutouts properly sized and located in tops for sinks and rims by others.
3. Provide end splash, flush with all edges of countertop, where countertop abuts wall surfaces.

PART 11 - BRACING

Where countertops have no casework below for support, bracing or "cleats" shall be constructed 1½" x 1½" x length and covered by GP 28 plastic laminate on all exposed sides. These cleats shall be mounted at walls with mechanical fasteners to support the weight of the countertop.

PART 12 - WINDOW STOOLS

Plastic laminated window stools shall be 22mm moisture-resistant chipboard, Class E1, according to DIN EN 312/5, finished on top, bottom and sides with horizontal grade (HP) high pressure laminate as manufactured by a nationally known laminate company, using moisture-resistant adhesives. Provide sealant to back exposed edge of window stools, and caulk continuously between window and the laminate stool.

Colors and patterns of plastic laminate shall be as selected by the Architect from full product line of national manufacturers such as Formica, Wilsonart, Pionite, Nevamar and Arborite.

PART 13 - COORDINATION

B. Coordinate work of this section with related work of other sections as necessary to obtain proper installation of all items.

C. Verify site dimensions of cabinet location in buildings prior to fabrication.

D. Do not install casework until all concrete, masonry and plaster work is dry.

PART 14 - INSTALLATION

A. Installation shall consist of assembling to form complete units, placing, leveling, scribing, trimming and anchoring.
   1. Filler between wall and casework shall not exceed 1" unless noted otherwise and shall be recessed 1/16" + from the face of casework.
   2. Plastic-laminate covered ceiling enclosures shall be flush with the face of the doors and 1/8" proud on the sides of exposed ends or backs.

B. Fasten items to building construction as detailed or as otherwise required to provide a secure, permanent installation.

C. Where fastening spacings or sizes are not shown, use spacings and sizes of bolts, screws, etc., which will develop the full strength of the members being fastened. Thus failure due to over stress must occur in the members before occurring in the fastenings.

   1. Fastening to concrete shall be by anchor bolts embedded in masonry or by self drilling masonry anchor.
   2. Fastening to masonry shall be of similar manner.
   3. Fastening to plaster or drywall construction shall be into wood studs or blocking placed there early in the construction. Toggle bolts may be used only in such cases where no blocking can be found, but fasteners must still penetrate solid wall supports for a secure installation.

PART 15 - PROTECTION

Upon installation of casework and countertops, all installed materials shall be covered with appropriate protection from further construction. The General Contractor will be responsible for repairing or replacing any product damaged by subsequent construction and finish work, with no additional cost to the Owner.

End of Section