SECTION 064116 - PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS

PART 1 - GENERAL

1.1 WORK INCLUDES

A. Special fabricated cabinet units.
B. Countertops.
C. Cabinet hardware.
D. Preparation for installing utilities.

1.2 RELATED WORK

A. Section 06 10 00 – Rough Carpentry.
B. Section 06 20 00 – Finish Carpentry.
C. Section 07 90 00 – Joint Protection.
D. Division 22; Plumbing fixtures.

1.3 REFERENCES

A. American Woodwork Institute (AWI)
B. ANSI/BHMA A156.9 - Cabinet Hardware. AWI - Quality Standards.
C. FS MM-L-736 - Lumber, Hardwood.
D. FS MMM-A-130 - Adhesive, Contact.
E. NEMA LD3 - High Pressure Decorative Laminates.
F. PS 1 - Construction and Industrial Plywood. ANSI - 208.2 1986 Medium Density Fiberboard 48 lb.
G. PS 20 - American Softwood Lumber Standard.
H. PS 51 - Hardwood and Decorative Plywood.
I. PS 58 - Basic Hardboard.
J. ANSI - A208.1 - 1989 Industrial Particleboard 45 lb.
K. NEMA LD3 - 1985 American Laminators Association ALA 1988 Thermoset Melamine panels.

1.4 QUALITY ASSURANCE

A. Perform work to premium quality in accordance with "Quality Standards" of the Architectural Woodwork Institute (AWI).

1. Section 400B for Custom Laminate Clad Casework.
2. Section 1600B Modular Plastic Clad Casework.

1.5 SUBMITTALS

A. Submit shop drawings, samples and product data under Special Provisions requirements.
B. Include materials, component profiles, fastening methods, assembly methods, joint details, accessory listings, and schedule of finishes.

1.6 DELIVERY, STORAGE AND HANDLING

A. Do not deliver shop fabricated carpentry items until site conditions are adequate tor receive the work. Protect items from weather while in transit.
B. Store indoors, in ventilated areas with a constant minimum temperature of 60 degrees F, maximum relative humidity of 60 to 80 percent.

PART 2 - PRODUCTS

2.1 CASEWORK - LAMINATE CLAD

A. AWI Premium Grade
B. Construction. Details shall conform to Flush Overlay without Face Frame. All cabinet hardware shall be furnished and installed by the casework manufacturer.
C. Identification of Parts
1. Exposed Parts-Surfaces visible when:
a) Drawer fronts and doors are closed.
b) Behind clear glass doors.
c) Bottoms of cabinets are 42" or more above finished floor.
d) Tops of cabinets are below 78" above finish floor.

2. Semi-Exposed Parts-Surface visible when:
a) Drawers/Doors are in the open position.
b) Bottoms of cabinets are more than 30" and less than 42" above finish floor.

3. Concealed Surfaces-Surfaces are concealed when:
a) Surfaces are not visible after installation.
b) Bottoms of cabinets are less than 30" above finish floor.
c) Tops of cabinets are over 78" above finish floor and are not visible from an upper level.
d) Stretchers, blocking and/or components are concealed by drawers.

2.2 CABINET MATERIALS

A. Body Members. Tops, ends, partitions, bottoms, rails 3/4".
B. Shelves. 3/4" Industrial Particleboard 45 lb. for spans up to 36". 1" Industrial Particleboard 45 lb. for spans up to 48".
C. Backs. 1/4" hardboard with backer.
D. Doors and Drawer Fronts. 3/4" plywood.
E. Drawers. 1/2 FAS Grade hardwood birch or red oak for sides, back, and sub fronts. 1/4" birch or oak plywood for bottoms. 1/4" laminated safety or 1/4" tempered.
F. High pressure decorative laminate (HPDL) Type I. Application per

manufacturers' specifications. All plywood components shall have HPDL covering as follows: Brand and color as selected by Architect -.050 (1/16) thickness for full wall, splashes above 6" countertop solid resin splash. .030 vertical grade HPDl for exposed ends, doors, shelves, upper cabinet bottoms, exposed back and support panels. .020 HPDL cabinet liner, almond color for all semi-exposed surfaces at sink base cabinets and backs of doors and drawers. .020 back sheet, HPDL brown for a concealed area. The Architect will select plastic laminate colors from manufacturer's full range of solid colors, standard patterns and special patterns.

G. Countertops. For all sink and lavatory tops: MSI Quartz 3cm. Refer to material schedule for color selections.

H. Semi-exposed surfaces other than sink cabinets to be 3/4" melamine panel equal to Roseburg "RMP" Resin Tite". White as selected by Architect. Vinyl coated boards not acceptable.

I. Edge-banding - For all components parts. Apply .050 (1/16) Heavy Duty PVC Banding of color and texture to match HPDL.

J. Hardware.
   1. Hinges – Grass Nexis 125 Series 125 degree opening, self closing.
   2. Pulls – Hafele 155.00.951 Horizontal Installation, Matte Nickel Finish
   3. Adjustable shelf supports – Hafele 282.04.711, Steel, Nickel Plated
   4. Drawer Guides – Accuride 38E2EC. Light duty (100lb), steel ball bearing, full extension, soft closing.
   5. Silencers – 3M bumpon SJ6553, clear, self adhesive
   6. Adjustable Shelves on Wall - KV #80 Standards Light Duty KV #87 Heavy Duty
   7. KV #180 Brackets Light Duty KV #187 Heavy Duty Brackets As selected by Architect
   8. Hardware Schedule:
      a) Each cabinet door to have: 2 hinges, 1 pull, 2 silencers
      b) Each drawer to have: 1 pull, 1 set drawer slide, 2 silencers

2.3 WOOD TREATMENT

A. Wood Preservative: CCA; AWPB Standard LP-Z or LP-ZZ type manufactured by Wolman.

2.4 FABRICATION

A. Fabricate casework per AWI specifications and as specified.

B. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.

C. Apply HPDL finish in full sheets. Tops up to 12'-0" long shall be one piece. Fit corners and V-joints to hairline finish. Secure joints with mechanical fasteners. Locate counter joints minimum of 24" from sink cutouts.

D. Cabinet Construction: Concealed Joint
   1. Construction doweled or blind dado, NO visible fasteners. Ends, side panels, and rails shall have minimum 8mm dowel, 128mm on center.
   2. Cabinet back recessed and dadoed into sides.

3. Provide nailer for attachment to walls.
4. Sink cabinet back shall be removable.
5. Sink base cabinets to have corners reinforced at top with metal corner braces. Braces to facilitate attachment of counter top to cabinet while reinforcing ends to front and back rails.
6. Back splashes shall be integral with countertop.
7. Cabinet bases shall be exterior glue, plywood frame front and back rails with intermediate jumper - maximum 24" o.c.
8. Scribes - provide scribes where cabinets butt walls with maximum 1" width scribe.
9. Counter tops at sinks to have coved back splash square corner at all other locations.
10. All cabinet doors and drawer fronts must have .020 cabinet liner balance to .030 vertical face.
11. Attach drawer fronts with minimum 4 screws and pulls through bolt. Provide cushion bumps for doors and drawers.
12. Drawers shall be dovetail or dowel construction with bottom dado into sides, backs, and sub-fronts. Glue and clamp so that drawers do not rattle. Use intermediate support for drawers over 24". Pre-finish drawer with clear finish equal to AWI System #2. Dado joint NOT allowed.
13. Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes, fixtures and fittings. Verify all locations from onsite dimensions. Prime coat contact surfaces of cut edges.
14. Install all cabinet hardware.
15. Tolerances and Quality. Flushness between factory assembled joints - maximum .010. Flatness of cabinet doors - measured diagonally per lineal foot, maximum .036. Maximum gap between back end of adjustable shelf and case between back end of adjustable shelf and case side, maximum 1/16 inch.
16. Edge Joint Quality. All laminate edges shall be ease (sharp corner removed). Chip out of the laminate shall be invisible when viewed at 48 inches.
17. Particleboard, MDF and hard board will not be allowed in any lavatory, sink cabinet or wet area.

PART 3 – EXECUTION

3.1 INSTALLATION OF FINISH CASEWORK

A. Comply with AWI Special Provisions requirements for Installation.
B. Set and secure casework in place; rigid, plumb, and level.
C. Use fixture attachments in concealed locations for wall-mounted components.
D. Use concealed joint fasteners to align and secure adjoining cabinet units, counter tops.
E. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.
F. Secure cabinet and counter bases to floor using appropriate angles and anchorages. Set bases to bed of sealant.

3.2 ADJUSTING

A. Adjust work under Special Provisions requirements.
B. Adjust moving or operating parts to function smoothly and correctly.

3.3 CLEANING

A. Clean work under Section 01 70 00.
B. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION 064116