

**Part 1            General**

**1.1            SECTION INCLUDES**

- .1 Post-formed plastic laminate clad countertops.
- .2 Plastic laminate clad case bodies, and miscellaneous components and fixtures.
- .3 Cabinet hardware.

**1.2            RELATED SECTIONS**

- .1 Mechanical Sections.
- .2 Electrical Sections.

**1.3            REFERENCES**

- .1 American National Standards Institute (ANSI).
  - .1 ANSI A135.4-1995, Basic Hardboard.
  - .2 ANSI A208.1-1999, Particleboard.
- .2 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
  - .1 Architectural Woodwork Quality Standards Illustrated, Latest Edition.
- .3 Canadian Plywood Association (CANPLY).
- .4 Canadian Standards Association (CSA)
  - .1 CSA B111-1974, Wire Nails, Spikes and Staples.
  - .2 CSA O151-M1978, Canadian Softwood Plywood.
- .5 National Electrical Manufacturers Association (NEMA).
  - .1 NEMA LD3-2000, High-Pressure Decorative Laminates.
- .6 State Standards of the Russian Federation (GOST).
  - .1 GOST 1055-71 - Birch plywood. Technical Requirements for Export Products.

**1.4            QUALITY ASSURANCE**

- .1 The architectural casework manufacturer is to furnish, at the request of the Departmental Representative, a list of completed projects of equal or more value than this project completed in the last five years.
- .2 Where modifications to the AWMAC QSI are included in this specification, such modifications shall govern in case of conflict.
- .3 Any reference to Custom or Premium grade in this Section shall be as defined in the AWMAC QSI.
- .4 Any item not given a specific quality grade shall be Custom grade as defined by AWMAC QSI.
- .5 Casework manufacturer to maintain a copy of AWMAC QSI on site for reference purposes.
- .6 The casework manufacturer is responsible for all field dimensions on site that will affect the work.

**1.5 SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00.
- .2 Shop Drawings:
  - .1 Indicate construction details of all architectural woodwork and general arrangements; typical and special installation conditions; materials being supplied and all connections, attachments, anchorage and location of exposed fastenings, as applicable.
  - .2 Incorporate plans, elevations, sections, and details for all casework in scale.
    - .1 The details shall show all thicknesses, types and finishes and all cabinet hardware.
- .3 Samples:
  - .1 Submit duplicate colour samples of laminated plastic for colour selection.
  - .2 When requested by the Departmental Representative, submit duplicate sample of each hardware item requested.
- .4 No work shall be fabricated until the shop drawings have been reviewed and all related submittals and samples as required by the specification have been reviewed by the Departmental Representative.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- .1 Do not deliver until painting and similar operations have been completed in installation areas.
- .2 Handle materials to prevent damage to finished surfaces. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

**1.7 PROJECT CONDITIONS**

- .1 Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings.
- .2 Coordinate fabrication schedule with construction progress to avoid delaying the Work.

**Part 2 Products**

**2.1 PANEL PRODUCTS**

- .1 Particleboard: to ANSI A208.1, Grade M2, thicknesses as indicated.
  - .1 Urea-Formaldehyde free.
  - .2 Acceptable Product: Flakeboard Vesta as manufactured in St. Stephen, New Brunswick.
- .2 Canadian softwood plywood (CSP): Urea-Formaldehyde free; Poplar plywood: to CSA O121, standard construction; thickness as indicated, grade stamped in accordance with CANPLY.
- .3 Melamine Panels (MCP): to NEMA LD3, consisting of a decorative paper impregnated and saturated with melamine resin, thermally fused under heat and pressure to Grade M3 particleboard core, thickness as indicated.
  - .1 Overlay bonded to both faces to prevent warping.

## **2.2 PLASTIC LAMINATE**

- .1 High-Pressure Decorative Laminates (HPL) to NEMA LD3, types as follows:
  - .1 General purpose type, grade as follows:
    - .1 HGS, 1.2 mm thick for horizontal surfaces.
    - .2 VGS, 0.7 mm thick for light duty horizontal and vertical surfaces.
  - .2 Post-forming type: HGP, 1.0 mm thick.
  - .3 Cabinet liner type: Grade CLS, 0.5 mm thick.
  - .4 Backer type, grade as follows:
    - .1 BKH, 1.2 mm thick.
    - .2 BKV, 0.7 mm thick.
- .2 Provide backer sheet of same thickness as face sheet to reverse of all countertops, except post-formed units.
- .3 Approved Manufacturers: Formica, WilsonArt, Nevamar, UniBoard
- .4 Low VOC Adhesives: Contact adhesive to CAN/CGSB-71.20, semi-rigid (polyvinyl adhesive to CSA O112.4) or rigid adhesives (urea resin adhesive to CSA O112.5, resorcinol resin adhesive to CSA O112.7) may be used.
  - .1 Consult manufacturer for selection of adhesive for materials and application.
  - .2 Use waterproof adhesives for countertops.
- .5 Colour and pattern as selected by Departmental Representative from unrestricted range.

## **2.3 COUNTERTOPS**

- .1 Post-formed Countertops:
  - .1 Countertop core: particleboard, thickness as indicated.
  - .2 Finish: Post-formed HPL, HGP Grade.
    - .1 Colour and pattern as selected by Departmental Representative from unrestricted range.
  - .3 Provide backsplashes and apron profiles as indicated.
  - .4 Provide matching laminate to exposed edges of core not covered by post-forming laminate.
- .2 Laminate-Clad Countertops:
  - .1 Countertop core: particleboard, thickness as indicated.
  - .2 Finish: General purpose HPL, HGS Grade.
    - .1 Colour and pattern as selected by Departmental Representative from unrestricted range.
  - .3 Provide plastic laminate edge banding to exposed edges of core.

## **2.4 HARDWARE AND COMPONENTS**

- .1 Hinges: 110° opening angle, nickel plated steel with self closing spring mechanism, fully concealed and adjustable, c/w mounting plates.
  - .1 Provide hinges for flush overlay casework design as indicated.
  - .2 Acceptable Product: Blum Clip.

- .2 Drawer Slides:
  - .1 Drawer slides for light and medium duty drawers, 610 mm wide or less:
    - .1 Acceptable Product: Accuride 7432 ball bearing, rail mount, full extension, 45 kg load rating.
    - .2 Clear zinc finish.
  - .2 Drawer slides for heavy duty drawers, 1100 mm wide or less:
    - .1 Acceptable Product: Accuride 3640 ball bearing, rail mount, full extension with 25 mm over travel, 90 kg load rating.
    - .2 Clear zinc finish.
- .3 Door and Drawer Pulls: Richelieu #3486, brushed nickel finish, 96 mm c/c dimension or approved alternate
- .4 Shelving Standards: Adjustable, recessed, steel with zinc finish, length as required with heavy duty metal shelf clips (4 per shelf).

### **Part 3 Execution**

#### **3.1 FABRICATION - GENERAL**

- .1 Shop assemble casework and other components for delivery to site in units easily handled and to permit passage through building openings.
- .2 Joinery to be in accordance with the AWMAC QSI.
- .3 When necessary to cut and fit on site, provide materials with ample allowance for cutting.
  - .1 Provide strip for scribing and site cutting.
- .4 Provide cut-outs for plumbing fixtures, inserts, appliances, outlet boxes, and other fixtures and fittings.
- .5 Natural and manufacturing defects in excess of those permitted in the grade specified are permitted if such defects are to be covered by adjoining members or otherwise concealed.
- .6 Carefully fit equipment to be installed.
- .7 Provide filler pieces when required.
- .8 Set nails and countersink screws, apply colour matched wood filler to indentations, sand smooth and leave ready to receive finish.
- .9 Shop install cabinet hardware for doors, shelves and drawers.
- .10 Recess shelf standards leaving 2 mm above surface of panel.
- .11 Shelving to cabinetwork to be adjustable and full depth of cabinet unless otherwise noted.

#### **3.2 FABRICATION - CUSTOM CABINET UNITS**

- .1 Fabricate in accordance with AWMAC QSI, Custom grade.
- .2 General Construction: Flush overlay, concealing cabinet case body.
- .3 Thickness: Thickness for panels identified on Drawings shall govern.
- .4 Case Body:
  - .1 Exposed Ends: Not less than 16 mm thick melamine.
  - .2 Unexposed Ends: Not less than 16 mm thick melamine.
  - .3 Tops and Bottoms: Not less than 16 mm thick melamine, fully supported and secured in rabbets in panels.
  - .4 Backs: Not less than 13 mm thick fastened to machined rear edge of ends, top and bottom case partitions.

- .5 Exterior Exposed Finish: HPL, VGS grade, colour and pattern selection by Departmental Representative.
- .6 Interior Finish: Antique White melamine finish.
- .7 Edgebanding: Laminate tape, colour match to exposed finish.
- .8 Toe kicks are to be a separate item and not made part of the base unit.
- .5 Doors and Applied Drawer Fronts: Both faces of solid slab panel doors and drawer fronts to be finished in plastic laminate of same thickness, to prevent warpage:
  - .1 Panel: Not less than 16 mm thick particleboard.
  - .2 Exposed Finish: HPL, VGS grade, colour and pattern selected by Interior Designer.
  - .3 Concealed Finish: to match exposed finish.
  - .4 Edgebanding: Laminate tape, colour match to exposed finish.
- .6 Drawers: box-type construction with applied drawer fronts.
  - .1 Sides, Backs and Sub-fronts: Melamine, antique white colour, 16 mm thickness.
    - .1 Sub-front and back rabbeted into sides and secured with glue and mechanical fasteners.
    - .2 Fasten applied front to sub-front with mounting screws from interior of body.
  - .2 Bottoms: Hardboard, 6 mm thickness, set into rabbets in back, sides, and front.
- .7 Shelving: Melamine.
  - .1 Semi-exposed finish, shelves within cabinets: Antique white melamine finish both faces of panel, laminate tape edgebanding all four sides, antique white colour.
  - .2 Exposed finish, exposed shelving without doors: HPL, VGS grade, colour and pattern selected by Departmental Representative.
    - .1 Colour-matching laminate tape edgebanding all four sides.
  - .3 Thickness: 19 mm thick for up to 915 mm unsupported length, 25 mm thick for unsupported lengths between 915 mm and 1066 mm, unless otherwise indicated.
- .8 Toe Kicks: Not less than 19 mm CSP plywood, full height of toe space, Plam finish.
- .9 Corner Blocks: Particleboard or CSP plywood; glued and fastened in each of four top corners to maintain cabinet squareness and rigidity.

### **3.3 PREPARATION**

- .1 Verify adequacy of backing and support framing.

### **3.4 INSTALLATION**

- .1 Do architectural woodwork to AWMAC QSI, except where specified otherwise.
- .2 Install prefinished casework and other components at locations shown on drawings.
  - .1 Position accurately, level, plumb straight.
- .3 Fasten and anchor casework securely.
  - .1 Provide heavy duty fixture attachments for wall mounted cabinets.
  - .2 Exposed screw to be installed with chrome cup washers.
  - .3 Recessed screws shall be covered with laminate matching adhesive backed dot.
- .4 Install countertops using draw bolts where applicable.

- .5 Scribe and cut as required to fit abutting walls and to fit properly into recesses and to accommodate piping, columns, fixtures, outlets or other projecting, intersecting or penetrating objects.
- .6 At junction of plastic laminate counter back splash and adjacent wall finish, apply small bead of clear, paintable, mould resistant silicone sealant.
- .7 Apply water resistant building paper over wood framing members in contact with masonry or cementitious construction.
- .8 Fit hardware accurately and securely in accordance with manufacturer's directions.
- .9 Install shelving.

### **3.5 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.
- .3 Clean surfaces of plastic laminate with a damp cloth or ordinary bar soap and water.
  - .1 Harsh abrasive cleansers shall not be used.

**END OF SECTION**