

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 07 21 00 - Building Insulation.

1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM)
- .2 International
 - .1 ASTM A123/A123M-15, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM A653/A653M-15e1, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .3 ASTM C645-14e1 Standard Specification for Nonstructural Steel Framing Members
 - .4 ASTM D1761-12, Standard Test Methods for Mechanical Fasteners in Wood.
 - .5 ASTM D5456-14b, Standard Specification for Evaluation of Structural Composite Lumber Products.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-71.26-M88, Adhesive for Field-Gluing Plywood to Lumber Framing for Floor Systems.
- .4 Canadian Plywood Association (CANPLY)
 - .1 CANPLY – Canadian Plywood Handbook.
- .5 Canadian Standards Association (CSA International)
 - .1 CSA B34-1972, Misc Bolts and Screws
 - .2 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
 - .3 CSA O112.9-2010(2014), Evaluation of Adhesives for Structural Wood Products (Exterior Exposure).
 - .4 CSA O121-08(2013), Douglas Fir Plywood.
 - .5 CAN/CSA O122-2016, Structural Glued-Laminated Timber.
 - .6 CSA O141-05(R2014), Softwood Lumber.
 - .7 CSA O151-09(2014), Canadian Softwood Plywood.
 - .8 CSA O325-2016, Construction Sheathing.
 - .9 CSA O437 Series-93(R2011), Standards on OSB and Waferboard.
- .6 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 2014.

1.3 SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for wood products and accessories and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Province of New Brunswick.

1.4 QUALITY ASSURANCE

- .1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood, particleboard, OSB and wood based composite panels in accordance with CSA and ANSI standards.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect wood from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Lumber: softwood, S4S, moisture content 19% (S-dry) or less in accordance with following standards:
 - .1 CSA O141-05(R2014).
 - .2 NLGA Standard Grading Rules for Canadian Lumber 2014.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
 - .1 Board sizes: "Standard" or better grade.
 - .2 Dimension sizes: "Standard" light framing or better grade.
 - .3 Post and timbers sizes: "Standard" or better grade.
 - .4 Framing and board lumber: in accordance with NBC.

- .3 Plywood:
 - .1 Douglas fir plywood (DFP): to CSA O121-08(2013), standard construction. Urea-Formaldehyde free, thickness as indicated, grade stamped in accordance with CANPLY and as follows:
 - .1 Electrical, Telephone and Data and equipment mounting boards backboards: Douglas Fir Good one-side (G1S) Fire Rated.
 - .2 CSA O151-09(2014), (CSP), CANPLY Grade SHG; un-sanded, exterior use, thicknesses as indicated; Urea-Formaldehyde free.
 - .1 General use
 - .2 Thickness as indicated.
 - .3 Pressure preservative treatment.
- .4 Glass Mat, Gypsum Board: to ASTM C 1177 thickness 16mm or as noted.
 - .1 Use for all exterior vertical panel work locations and as shown.
 - .2 Acceptable products:
 - .1 GlasRoc sheathing as manufactured by CertainTeed
 - .2 Dense Glass as manufactured by Georgia Pacific.
 - .3 Green Glass Fiberglass faced sheathing by Temple-Inland.
 - .4 Securock Glass Mat sheathing by CGC
 - .5 Approved alternate

2.2 ACCESSORIES

- .1 Fasteners and Anchors:
 - .1 Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
 - .2 Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt fastener for anchorages to steel.
- .2 Resilient Furring: to ASTM C645-14e1
- .3 Sill Plate Gasket: 6 mm thick, plate width, closed cell polyethylene foam from continuous rolls.
- .4 Nails, spikes and staples: to CSA B111-1974 (R2003),.

Part 3 Execution

3.1 INSTALLATION

- .1 Comply with requirements of NBC Latest adopted edition; supplemented by following paragraphs.
 - .1 Install members true to line, levels and elevations, square and plumb.
 - .2 Construct continuous members from pieces of longest practical length.
 - .3 Place foam sill gasket under framed assemblies.

- .4 Install lumber and panel materials so that grade marks and other defacing marks are concealed or are removed by sanding where materials are left exposed.
- .5 Install furring and blocking as required to space out and support wall and ceiling finishes, facings, fascia, soffit, siding electrical equipment mounting boards and other work as required.
- .6 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .7 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized fasteners.
- .8 Install sleepers as indicated.
- .9 Equipment mounting boards:
 - .1 Plywood, DFP, G1S, grade, square edge minimum 19 mm thick.
 - .2 Install telephone, data, equipment and electrical panel back boards sized a minimum of 300 mm beyond size of the equipment.
 - .3 Equipment boards are to be painted prior to installation including walls behind boards. Subject to removal if direction not followed.
- .10 Frame and block openings for support of door and window frames, and other equipment and as indicated.
- .11 Secure sheathing to framing members with ends over firm bearing and staggered and as specified on the drawings.
- .12 Install nails or bolts in each hole provided in each framing anchor, tie down, strap, hold down, etc.
- .13 Install rough bucks, nailers and rough linings to openings as required to provide backing for frames and other work.

3.2 ERECTION

- .1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .2 Countersink bolts where necessary to provide clearance for other work.
- .3 Use nailing disks for soft sheathing as recommended by sheathing manufacturer.

END OF SECTION

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 06 10 00 – Rough Carpentry

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International).
 - .1 CSA O80 Series-97 (R2002), Wood Preservation.
 - .2 CAN/CSA-O86-09, Engineering Design in Wood.
 - .3 CAN/CSA-O141-91(R1999), Softwood Lumber.
 - .4 CSA S307-M1980(R2001), Load Test Procedure for Wood Roof Trusses for Houses and Small Buildings.
 - .5 CSA S347-99(R2004), Method of Test for Evaluation of Truss Plates Used in Lumber Joints.
 - .6 CSA W47.1-03, Certification of Companies for Fusion Welding of Steel.
- .2 Health Canada / Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .3 National Lumber Grades Authority (NLGA)
 - .1 NLGA-03, Standard Grading Rules for Canadian Lumber.
- .4 National Research Council (NRC)/Institute for Research in Construction (IRC) - Canadian Construction Materials Centre (CCMC)
 - .1 CCMC-2002, Registry of Product Evaluations.
- .5 Truss Plate Institute of Canada (TPIC)
 - .1 TPIC - 2011 Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses (Limit States Design).

1.3 DESIGN REQUIREMENTS

- .1 Design light metal plate connected wood trusses in accordance with TPIC truss design procedures for wood truss chords and webs in accordance with engineering properties in CAN/CSA-O86.
- .2 Design light metal plate connected wood trusses in accordance with TPIC truss design procedures for truss joint designs to test engineering properties in accordance with CSA S347 and listed in CCMC Registry of Product Evaluations.
- .3 Design trusses, bracing and bridging in accordance with CAN/CSA-O86-09 for loads indicated and for building locality as ascertained by NBC, Climatic Information for Building Design in Canada and minimum uniform and minimum concentrated loadings stipulated in NBC commentary.
- .4 Limit live load deflection to 1/360th of span where gypsum board ceilings are hung directly from trusses.

- .5 Limit live load deflections to 1/240th of span unless otherwise specified or indicated.
- .6 Provide camber for trusses as indicated.

1.4 QUALITY ASSURANCE

- .1 Qualifications.
 - .1 Fabricator for trusses to show evidence of quality control program such as provided by regional wood truss associations, or equivalent.
 - .2 Fabricator for welded steel connections to be certified in accordance with CSA W47.1. Products
- .2 Health and Safety.
 - .1 Do construction occupational health and safety in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .3 Construction requirements: in accordance with Section 01 35 29 – Health and Safety Requirements.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data.
 - .1 Submit manufacturer's printed product literature, specifications and datasheet in accordance with Section 01 33 00 - Submittal Procedures.
 - .2 Shop Drawings.
 - .1 Each shop drawing submission showing connection details to be signed and stamped by professional engineer registered or licensed in the province of New Brunswick, Canada.
 - .3 Instructions: submit manufacturer's installation instructions.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Storage and Protection.
 - .1 Store trusses on job site in accordance with manufacturer's instructions. Provide bearing supports and bracings. Prevent bending, warping and overturning of trusses.

Part 2 Products

2.1 MATERIALS

- .1 Lumber: maximum moisture content of 19% at time of fabrication and to following standards:
 - .1 CAN/CSA-O141.

- .2 NLGA (National Lumber Grading Association), Standard Grading Rules for Canadian Lumber.

- .2 Fastenings: to CAN/CSA-O86.

2.2 FABRICATION

- .1 Fabricate wood trusses in accordance with approved shop drawings.
- .2 Provide for design camber and roof slopes when positioning truss members.
- .3 Connect members using metal connector plates.

2.3 SOURCE QUALITY CONTROL

- .1 Identify lumber by grade stamp of an agency certified by Canadian Lumber Standards Administration Board.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheet.

3.2 ERECTION

- .1 Erect wood trusses in accordance with approved shop drawings.
- .2 Handling, installation, erection, bracing and lifting in accordance with manufacturer's instructions.
- .3 Make adequate provisions for handling and erection stresses.
- .4 Exercise care to prevent out-of-plane bending of trusses.
- .5 Install temporary horizontal and cross bracing to hold trusses plumb and in safe condition until permanent bracing and decking are installed.
- .6 Install permanent bracing in accordance with approved shop drawings, prior to application of loads to trusses.
- .7 Do not cut or remove any truss material without approval of Consultant.

END OF SECTION

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 05 50 00 - Metal Fabrications.
- .2 Section 07 90 00 – Sealants
- .3 Mechanical Sections.
- .4 Electrical Sections.

1.2 REFERENCES

- .1 American National Standards Institute (ANSI).
 - .1 ANSI A135.4-1995, Basic Hardboard.
 - .2 ANSI A208.1-1999, Particleboard.
 - .3 ANSI/HPVA HP-1-10, Standard for Hardwood and Decorative Plywood.
- .2 ASTM International
 - .1 ASTM E1333-[10], Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates From Wood Products Using a Large Chamber.
 - .2 ASTM D2832-[92(R2011), Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.
 - .3 ASTM D5116-10, Standard Guide For Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products.
- .3 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
 - .1 Architectural Woodwork Standards 2nd edition, 2014 Canadian Plywood Association (CANPLY).
- .4 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-71.20-M88, Adhesive, Contact, Brushable.
- .5 Canadian Standards Association (CSA)
 - .1 CSA B111-1974, Wire Nails, Spikes and Staples.
 - .2 CSA O112.10-08, Evaluation of Adhesives for Structural Wood Products (Limited Moisture Exposure).
 - .3 CSA O121-08, Douglas Fir Plywood.
 - .4 CSA O141-05(R2009), Softwood Lumber.
 - .5 CSA O151-09, Canadian Softwood Plywood.
 - .6 CSA O153-M1980(R2008), Poplar Plywood.
- .6 National Electrical Manufacturers Association (NEMA).
 - .1 NEMA LD3-2000, High-Pressure Decorative Laminates.
- .7 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 2010.

1.3 SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 Submittal Procedures.
- .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 Drawings are to note laminate manufacturer of preference so colour selection can be added to the shop drawings by the Departmental Representative.
 - .4 Submit product data for all items to be incorporated including glue, paint, varnish, attachments, anchors, etc.
- .3 Product Data
 - .1 Submit product data for all hardware.
- .4 Samples:
 - .1 Submit two (2) colour samples of each laminated plastic colour selected on shop drawings.
 - .2 Submit complete colour range of samples of Tap-Caps to be used for colour selection.
 - .3 Submit two (2) samples of each hardware item listed.
 - .1 Two (2) right and Two (2) left for paired items.
 - .2 Samples will not be returned.
- .5 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.

1.2 QUALITY ASSURANCE

- .1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood, particleboard, OSB and wood based composite panels to CSA and ANSI standards.
- .3 Casework manufacturer to maintain a copy of AWMAC QSI on site for reference purposes.

1.4 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store and handle materials in accordance with contract requirements and in accordance with manufacturer's written instructions.
- .2 All damaged materials will be replaced with new material.

1.5 PROJECT CONDITIONS

- .1 Field Measurements: Where casework 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 FINISH LUMBER

- .1 Hardwood Lumber: Clear, First Grade, Hard Maple or White Birch species, with plain sawn grain, of quality suitable for transparent finish.
- .2 Hardwood lumber: moisture content 11% or less in accordance with following standards:
 - .1 National Hardwood Lumber Association (NHLA).
 - .2 CAN/CSA-Z809 or SFI certified.
 - .3 AWMAC QSI Custom grade.

2.2 PANEL PRODUCTS

- .1 Panel product resin to contain no added urea-formaldehyde.
- .2 Particleboard: to ANSI A208.1, Grade M2, thicknesses as indicated.
 - .1 Minimum post-consumer recycled content of 25%.
 - .2 Acceptable Product: Flakeboard Vesta as manufactured in St. Stephen, New Brunswick.
- .3 Canadian softwood plywood (CSP): to CSA O151, standard construction, CAN/CSA-Z809 or SFI certified.
- .4 Douglas fir plywood (DFP): to CSA O121, standard construction, CAN/CSA-Z809 or SFI certified.
- .5 Hardwood plywood: to ANSI/HPVA HP-1.
- .6 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.

2.3 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 Adhesives:
 - .1 Low VOC Adhesives: Adhesives: VOC limit 120 g/L maximum to SCAQMD Rule 1168 GS-36.
 - .2 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 O112.10) may be used.
 - .3 Consult manufacturer for selection of adhesive for materials and application.
 - .4 Use waterproof adhesives in wet areas.

2.4 COUNTERTOPS

- .1 Solid Surface Countertops: Homogenous sheet material composed of acrylic resins, fire-retardant filler materials, and coloring agents.
 - .1 Finish: Colour as selected by the Departmental Representative from unrestricted range.
 - .2 Provide backsplashes and apron profiles as indicated.
 - .3 Profile edges as shown.
 - .4 Acceptable Product: Formica Solid Surface – Classics Series or Approved Equal
 - .5 Minimum thickness 19mm.
 - .1 Increase thickness as required due to span and or as noted.
 - .6 Provide steel angle framing or other means to support countertops with long spans without using braces to maintain clear span.

2.5 HARDWARE AND COMPONENTS

- .1 Hinges:
 - .1 Clip application, 110° opening angle, nickel plated steel with self-closing spring mechanism, fully concealed and adjustable, c/w mounting plates.
 - .2 Provide hinges for flush overlay casework design as indicated.
- .2 Drawer Slides:
 - .1 Drawer slides for light and medium duty drawers, 610 mm wide or less: Ball bearing, rail mount, full extension, 45 kg load rating, clear zinc finish. Certified to BHMA Grade 1 HD-100 Standard.

- .2 Drawer slides for heavy duty drawers, 1100 mm wide or less: ball bearing, rail mount, full extension with 25 mm over travel, 90 kg load rating, clear zinc finish. Certified to BHMA Grade 1 HD-100 Standard.
- .3 Door and Drawer Pulls:
 - .1 D-shaped wire pull, stainless steel with satin finish, 96 mm c/c dimension.
- .4 Shelving Standards and clips:
 - .1 Adjustable, recessed, steel with clear zinc finish, length as required with heavy duty metal shelf clips (4 per shelf).
- .5 Furring, Blocking, Shims, and Hanging Strips:
 - .1 CSP plywood.
- .6 Cam Locks:
 - .1 Chrome-plated cam locks, with keeper, latch length to suit application, for panel thicknesses indicated.
 - .1 Keyed alike in each room but different between rooms, cabinet interior door to be keyed separate in each case.
 - .2 Provide keys in duplicate for each lock.
- .7 Closet Rod; 32 mm diameter chrome with chrome end caps and centre support clip.
- .8 Counter Braces: FastCap Speed Braces;
 - .1 Sized to suit installation
 - .2 Colour as selected by the Departmental Representative.
- .9 Steel Support where required.

2.6 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.
 - .1 Coordinate with trades.
 - .2 Provide re-enforcing as required.
 - .3 Make cut out without chipping finish.
- .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.
 - .1 Provide filler pieces when required.

- .7 Set nails and countersink screws, apply colour matched wood filler to indentations, sand smooth and leave ready to receive finish.
- .8 Shop install cabinet hardware for doors, shelves and drawers.
- .9 Recess shelf standards leaving 2 mm above surface of panel.
- .10 Shelving to cabinetwork to be adjustable unless otherwise noted.

2.7 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 Upper Cabinet Construction / Installation:
 - .1 See 2.7.5 Case Body.
 - .2 Backs are to be hung on cleats fastened to wall and secured at bottom with recessed fasteners.
 - .3 Fasteners are to be concealed with Phillip Tap-Caps or Square Drive Tap-Caps matching laminate.
- .5 Case Body – Uppers and base units:
 - .1 Exposed Ends: Not less than 19 mm thick melamine or Plastic laminated where noted.
 - .2 Unexposed Ends: Not less than 19 mm thick melamine or Plastic laminated where noted.
 - .3 Tops and Bottoms: Not less than 19 mm thick melamine or Plastic laminated where noted, fully supported and secured in rabbets in panels.
 - .4 Backs: Not less than 13 mm thick melamine or Plastic laminated where noted, set in dado, installed in dado minimum 13 mm from back edge of case body and secured with hidden fasteners.
 - .5 Exterior Exposed Finish: HPL, VGS grade, colour and pattern selection by the departmental representative.
 - .6 Interior Finish: White melamine or selected coloured Plastic laminated where noted.
 - .7 Edge banding:
 - .1 Matching colour 3 mm PVC.
 - .2 Shop-bonded to core using hot-melt edge banding machine. Other methods not acceptable.
 - .3 All four sides of case bodies, are to be edge banded.
- .6 Doors and Applied Drawer Fronts:
 - .1 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 19 mm thick particleboard.
 - .2 Exposed Finish: HPL, VGS grade, colour and pattern selected by the departmental representative
 - .3 Concealed Finish: to match exposed finish.

- .4 Edge banding:
 - .1 Matching colour 3 mm PVC unless otherwise noted.
 - .2 Shop-bonded to core using hot-melt edgebanding machine. Other methods not acceptable.
 - .3 All four sides of doors and drawer fronts are to be edge banded.
- .7 Drawers: box-type construction with applied drawer fronts.
 - .1 Sides, Backs and Sub-fronts: Baltic Birch, 13 mm thickness, clear gloss urethane varnish finish.
 - .1 Sub-front and back rabbeted into sides and secured with glue and mechanical fasteners.
 - .2 Fasten applied front to sub-front with mounting washer screws from interior of body.
 - .2 Bottoms: Hardboard, 6 mm thickness, white laminate finish or 6 mm birch plywood, clear gloss urethane varnish finish. Set into dados in back, sides, and front.
- .8 Shelving:
 - .1 Semi-exposed locations: Shelves within cabinets with doors: White HPL on both faces of panel.
 - .1 Edge banding:
 - .1 Matching colour 3 mm PVC unless otherwise noted.
 - .2 Shop-bonded to core using hot-melt edge banding machine. Other methods not acceptable.
 - .3 All four sides of shelves are to be edge banded.
 - .1 Exposed locations: Exposed shelving without doors: HPL, VGS grade, colour and pattern selected by the departmental representative.
 - .1 Edge banding:
 - .1 Matching colour 3 mm PVC unless otherwise noted.
 - .2 Shop-bonded to core using hot-melt edge banding machine. Other methods not acceptable.
 - .3 All four sides of shelves are to be edge banded.
 - .2 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.
 - .3 Depth: Full depth.
- .9 Toe Kicks:
 - .1 Not less than 19 mm CSP plywood, full height of toe space, for applied resilient or hard tile base.
- .10 Support Brackets:
 - .1 Supplied and installed by this Section.
- .11 Steel Support where required.

Part 3 Execution

3.1 PREPARATION

- .1 Verify adequacy of backing and support framing.

3.2 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 recessed fixture attachments for wall mounted cabinets.
 - .2 Upper cabinets to be mounted on cleats.
 - .3 Infill top of upper cabinets where infill panels are used at ends.
 - .4 Caulk upper cabinets to wall.
- .4 Install countertops. Use draw bolts and glue in countertop joints.
- .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 mildew resistant sealant specified under Section 07 90 00.
- .7 Caulk gable ends to wall.
- .8 Apply water resistant building paper over wood framing members in contact with masonry or cementitious construction.
- .9 Fit hardware accurately and securely in accordance with manufacturer's directions.
- .10 Install shelving.

3.3 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. Harsh abrasive cleansers shall not be used.

3.4 PROTECTION

- .1 Provide protective coverings to prevent physical damage or staining following installation for duration of project.

END OF SECTION