

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 06 17 53 – Shop-Fabricated Wood Trusses.

1.2 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM)
 - .1 ASTM A123/A123M-17, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM F1667-18a, Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- .2 Canadian Standards Association (CSA International)
 - .1 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
 - .2 CSA O121-17, Douglas Fir Plywood.
 - .3 CSA O141-05 (R2019), Softwood Lumber.
 - .4 CSA O151-17, Canadian Softwood Plywood.
 - .5 CSA O325-16, Construction Sheathing.
- .3 National Lumber Grades Authority (NLGA)
 - .1 2017 Standard Grading Rules for Canadian Lumber.

1.3 QUALITY ASSURANCE

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood identification: by CANPLY (Canadian Plywood Association) certification stamp and in accordance with applicable CSA standards.

Part 2 Products

2.1 LUMBER MATERIAL

- .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% or less in accordance with following standards:
 - .1 CSA O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Bracing, blocking, bridging, nailing strips, strapping, wall plates, fascia and soffit framing, and miscellaneous framing:
 - .1 No.1/No.2 grade spruce, pine, fir, (SPF), or better.

2.2 PANEL MATERIALS

- .1 Douglas fir plywood (DFP): to CSA O121, standard construction.
- .2 Canadian softwood plywood (CSP): to CSA O151, standard construction.
- .3 Plywood, OSB and wood based composite panels: to CSA O325.
- .4 Roof Sheathing to be CANPLY Exterior Sheathing grade, T&G, to CSA O151 CSP.

2.3 ACCESSORIES

- .1 Nails, spikes and staples: to CSA B111 and ASTM F1667.
- .2 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
- .3 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, and screws as recommended for purpose by manufacturer.
- .4 Sill plate gasket: polyethylene foam, minimum thickness 6 mm x full width of sill plate.

2.4 FINISHES

- .1 Galvanizing: to ASTM A123/A123M. Use galvanized fasteners for exterior work and interior humid areas.

Part 3 Execution

3.1 INSTALLATION

- .1 Comply with requirements of NBCC 2015, Division B, Part 9 supplemented by following paragraphs.
- .2 Install members true to line, levels and elevations, square and plumb.
- .3 Construct continuous members from pieces of longest practical length.
- .4 Install spanning members with "crown-edge" up.
- .5 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .6 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.

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.

3.3 ROOF SHEATHING

- .1 Plywood for roof sheathing shall be CANPLY, thickness as indicated on drawings, tongue and groove, exterior grade.

- .2 The roof system shall act as a structural diaphragm. Long dimension of roof sheathing shall be laid horizontally with ends staggered 1220 mm on centre. Unless otherwise indicated, nail all panel edges at supports with 64 mm long 3.25 mm dia. common nails, or equal, spaced at maximum 152 mm on centre. Nail spacing at intermediate supports shall not exceed 305 mm.

END OF SECTION

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 06 08 99 – Rough Carpentry for Minor Works.

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA O86:19, Engineering Design in Wood.
 - .2 CSA S307-M1980 (R2006), Load Test Procedure for Wood Roof Trusses for Houses and Small Buildings.
- .2 National Lumber Grades Authority (NLGA)
 - .1 2017 Standard Grading Rules for Canadian Lumber.
- .3 Truss Plate Institute of Canada (TPIC)
 - .1 TPIC 2019, Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses.
 - .2 TPIC Technical Bulletin #7 (R2012), Solar Ready Truss Design Procedure.
- .4 Truss Plate Institute (TPI)
 - .1 ANSI/TPI 1-2014 - National Design for Metal Plate Connected Wood Truss Construction.
 - .2 TPI HIB-91 - Commentary and Recommendations for Handling, Installing, and Bracing of Metal Plate Connected Wood Trusses.

1.3 DESIGN REQUIREMENTS

- .1 Design of roof truss system including connectors, wind uplift anchors, temporary and permanent bracing and bridging shall be the responsibility of the truss manufacturer. Truss manufacturer shall provide shop drawings bearing the stamp of a Professional Engineer licensed to practice in the province of Nova Scotia.
- .2 Design and supply of all truss components and fastenings is included under this section.
- .3 Design of truss system to be fully coordinated with related trades.
- .4 Design trusses and all temporary and permanent bracing and bridging in accordance with CSA O86 for loads indicated below, and minimum uniform and minimum concentrated loadings stipulated in NBC commentary.
- .5 In calculating basic roof snow load, use C_b factor of 0.8 and C_w factor of 1.0.
- .6 All design loads shall be in accordance with the 2015 edition of the National Building Code of Canada, Part 4, for a post-disaster building, but shall not be less than those indicated below. The roof trusses shall be designed by the manufacturer in accordance with the specified loadings, and to requirements as noted on the drawings. Their construction shall conform to the latest revision of all applicable CSA standards, including Standard S307.

- .1 Roof Loads: Specified Dead Load (Typical) = 1.00 kPa (Total)
- .2 Specified Snow Load
 - .1 $S_s = 3.1 \text{ kPa}$
 - .2 $S_r = 0.6 \text{ kPa}$
 - .3 Importance Factor $I = 1.25 \text{ ULS}, 0.9 \text{ SLS}$
- .3 Specified Wind Loads
 - .1 $q_{10} = 0.37 \text{ kPa}$
 - .2 $q_{50} = 0.48 \text{ kPa}$
 - .3 Importance Factor $I = 1.25 \text{ ULS}, 0.75 \text{ SLS}$
 - .4 Minimum uplift 1.2 kPa
- .4 Specified Seismic
 - .1 $S_a(0.2) = 0.118$
 - .2 $S_a(0.5) = 0.085$
 - .3 $S_a(1.0) = 0.054$
 - .4 $S_a(2.0) = 0.029$
 - .5 $PGA = 0.070$
 - .6 Importance Factor $I = 1.5 \text{ ULS}$
- .5 Minimum Dead Loads on Roof Truss Chords Shall be as Follows:
 - .1 $TC = 0.25 \text{ kPa}$
 - .2 $BC = 0.35 \text{ kPa}$
- .7 Truss system shall be designed to accommodate the support of all bulkheads or roof mounted and ceiling hung equipment. Truss manufacturer to coordinate with related trades.
 - .1 Truss system to be designed for the additional loads imposed by the solar panels. Design to be in accordance with the TPIC SR Truss Design Procedures as per TPIC Technical Bulletin #7. The attachment of the solar panel rail system is to be by the blocking method. Fastening directly to the top chord is not acceptable. The spacing between attachment points of the solar panel system may exceed 1.2 m and is to be coordinated with the panel supplier.
- .8 Truss manufacturer shall clearly show all nailing requirements for hangers, blocking, etc., on shop drawings.
- .9 Roof truss uplift anchorage shall be designed for minimum 1.2 kPa uplift. Provide minimum 1 uplift connector at each truss bearing point.
- .10 Exact dimensions of truss framing to be coordinated with architectural requirements and may vary slightly from that indicated on plans.
- .11 Limit live load deflection to 1/360th of span.
- .12 Provide camber for trusses as required.

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 Health and Safety:
 - .1 Do construction occupational health and safety in accordance with Section 01 35 29.06 - Health and Safety Requirements.

1.5 SUBMITTALS

- .1 Submittals to be in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's printed product literature, specifications and data sheets in accordance with Section 01 33 00 - Submittal Procedures.
- .3 Shop Drawings:
 - .1 Each shop drawing submission to be signed and stamped by a professional engineer registered or licensed in Nova Scotia, Canada.
- .4 Truss shop drawings to be fully legible and clearly show dead and live loads, joints, splices, configuration of truss, overhangs, spacing, connectors, hangers as applicable, and uplift anchorage, job location and all required erection and final bracing.
- .5 Indicate TPIC Truss Design Procedure and CSA O86 Engineering Design in Wood and specific CCMC Product Registry number of the truss plates.
- .6 Indicate species, sizes, and stress grades of lumber used as truss members. Show pitch, span, camber, configuration and spacing of trusses. Indicate connector types, thicknesses, sizes, locations and design value. Show bearing details. Indicate design load for members.
- .7 Submit stress diagram or print-out of computer design indicating design load for truss members. Indicate allowable load and stress increase.
- .8 Indicate arrangement of webs or other members to accommodate ducts and other specialties.
- .9 Show location of lateral bracing for compression members.
- .10 Instructions: submit manufacturer's installation and erection instructions.

1.6 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, handle, store and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 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.
- .3 Waste Management and Disposal:
 - .1 Separate waste materials for reuse and recycling.
 - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.

- .3 Collect and separate for disposal paper plastic polystyrene corrugated cardboard packaging material in appropriate on-site bins for recycling.
- .4 Separate for reuse and recycling and place in designated containers.
- .5 Fold up metal and plastic banding, flatten and place in designated area for recycling.

Part 2 Products

2.1 MATERIALS

- .1 Lumber: species, grade, softwood, S4S, with maximum moisture content of 19 % at time of fabrication and to following standards:
 - .1 CSA O141.
 - .2 NLGA (National Lumber Grading Association), Standard Grading Rules for Canadian Lumber.
- .2 Fastenings: to CSA O86.

2.2 FABRICATION

- .1 Fabricate wood trusses in accordance with reviewed shop drawings.
- .2 Provide for design camber and roof slopes when positioning truss members.

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 as indicated in accordance with reviewed shop drawings.
- .2 Handling, installation, erection, bracing and lifting to be 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 reviewed shop drawings, prior to application of loads to trusses.
- .7 Supply and install permanent web-member bracing in accordance with reviewed shop drawings, prior to application of loads to trusses. Coordinate requirements for bottom chord permanent bracing to be supplied and installed under Section 06 08 99 Rough Carpentry for Minor Works.
- .8 Restrict construction loads to less than final design loads to prevent overstressing of trusses.
- .9 Coordinate placement of decking and sheathing with work of this section.
- .10 Do not cut or remove any truss material without approval of Engineer.

3.3 CLEANING

- .1 Remove surplus materials, excess materials, rubbish, tools and equipment on completion of installation.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Section includes but is not limited to:
 - .1 Standing and running trim.

1.2 RELATED SECTIONS

- .1 Section 09 91 23 - Interior Painting.

1.3 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC).
 - .1 Architectural Woodwork Standard, Current Edition (AWS).
- .2 Canadian Standards Association (CSA)
 - .1 CSA B111-2003, Wire Nails, Spikes and Staples.
 - .2 CSA O121-2017 - Douglas Fir Plywood
 - .3 CSA O151-2017, Canadian Softwood Plywood.
 - .4 CSA O153-2019, Poplar Plywood.
 - .5 CSA O141-2019, Softwood Lumber.
- .3 National Electrical Manufacturers Association (NEMA).
 - .1 NEMA LD-3-2005, High-Pressure Decorative Laminates.

1.4 QUALITY ASSURANCE

- .1 Where modifications to the AWMAC AWS are included in this specification, such modifications shall govern in case of conflict.
- .2 Any reference to Custom or Premium grade in this Section shall be as defined in the AWMAC AWS.
- .3 Any item not given a specific quality grade shall be Custom grade as defined by AWMAC AWS.

1.5 QUALITY ASSURANCE

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood identification: by CANPLY (Canadian Plywood Association) certification stamp and in accordance with applicable CSA standards.

1.6 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00.

- .2 Submit shop drawings to indicate profiles in full scale.
- .3 Shop drawings shall show construction details and general arrangements; typical and special installation conditions; materials being supplied and all connections, attachments, anchorage and location of exposed fastenings, as applicable.
- .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 approved by the Departmental Representative.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, handle, store and protect materials in accordance with Section 01 61 00.
- .2 Protect materials against dampness during and after delivery.
- .3 Store materials in ventilated areas, protected from extreme changes of temperature or humidity.

Part 2 Products

2.1 FINISH LUMBER

- .1 Hardwood Lumber: AWMAC AWS Custom grade; Maple or Birch Species, maximum moisture content of 11 percent; with plain sawn grain, of quality suitable for transparent finish.

2.2 HARDWARE, FASTENERS AND ACCESSORIES

- .1 Fasteners and Anchorages: Provide nails, screws, and other anchoring devices of the type and size required for application indicated to provide secure attachment, concealed where possible.

2.3 PAINT FINISHES

- .1 Refer to Section 09 91 23.

2.4 FASTENERS AND ACCESSORIES

- .1 Wood screws: Type and size to suit application. Provide matching species wood plugs for members to receive stained or clear finishes. Provide coloured vinyl plugs to conceal fastenings in laminate-clad components.

Part 3 Execution

3.1 INSTALLATION

- .1 Do finish carpentry to Quality Standards of the Architectural Woodwork Manufacturers Association of Canada (AWMAC), Custom grade, except where specified otherwise.
- .2 Scribe and cut as required, fit to abutting walls, and surfaces, fit properly into recesses and to accommodate piping, columns, fixtures, outlets, or other projecting, intersecting or penetrating objects.

- .3 Form joints to conceal shrinkage.
- .4 Install items of finish carpentry as scheduled by this Section and as indicated on the Drawings.

3.2 CONSTRUCTION AND FINISH SCHEDULE

- .1 Fastening.
 - .1 Position items of finished carpentry work accurately, level, plumb, true and fasten or anchor securely.
 - .2 Design and select fasteners to suit size and nature of components being joined. Use proprietary devices as recommended by manufacturer.
 - .3 Set finishing nails to receive filler. Where screws are used to secure members, countersink screw in round cleanly cut hole and plug.
 - .4 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.
- .2 Standing and Running Trim:
 - .1 Fabricate using hardwood as indicated.
 - .2 Finish: Painted finish to Section 09 91 23.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 American National Standards Institute (ANSI)
 - .1 ANSI A208.1-2016, Particleboard.
 - .2 ANSI A208.2-2009, Medium Density Fiberboard (MDF) for Interior Applications.
 - .3 ANSI/HPVA HP-1-2009, Standard for Hardwood and Decorative Plywood.
- .2 ASTM International
 - .1 ASTM E1333-2014, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates From Wood Products Using a Large Chamber.
 - .2 ASTM D2832-92(2016), Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.
 - .3 ASTM D5116-2017, Standard Guide For Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products.
- .3 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
 - .1 Architectural Woodwork Quality Standards Illustrated, current edition.
- .4 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-71.20-M88, Adhesive, Contact, Brushable.
- .5 CSA International
 - .1 CSA B111-2003, Wire Nails, Spikes and Staples.
 - .2 CSA O151-2017, Canadian Softwood Plywood.
- .6 National Electrical Manufacturers Association (NEMA)
 - .1 ANSI/NEMA LD-3-2005, High-Pressure Decorative Laminates (HPDL).
- .7 National Lumber Grades Authority (NLGA) Standard Grading Rules for Canadian Lumber, current edition.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for architectural woodwork and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit two copies of WHMIS MSDS.
- .3 Shop Drawings:

- .1 Indicate details of construction, profiles, jointing, fastening and other related details.
 - .1 Scales: profiles full size, details half full size.
- .2 Indicate materials, thicknesses, finishes and hardware.
- .3 Indicate locations of service outlets in casework, typical and special installation conditions, and connections, attachments, anchorage and location of exposed fastenings.
- .4 Samples:
 - .1 Submit for review and acceptance of each unit.
 - .2 Samples will be returned for inclusion into work.
 - .3 Submit duplicate samples of laminated plastic for colour selection.
 - .4 Submit duplicate samples of laminated plastic joints, edging, cutouts and postformed profiles.
- .5 Certifications: submit certificates signed by manufacturer certifying that materials comply with specified performance characteristics and physical properties.

1.3 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.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and 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. Protect millwork against dampness and damage during and after delivery.
 - .1 Store millwork in ventilated areas, protected from extreme changes of temperature or humidity.
- .3 Storage and Handling Requirements:
 - .1 Store materials indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect architectural woodwork from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Canadian softwood plywood (CSP): to CSA O151, standard construction.
- .2 MDF (Medium Density Fibreboard): to ANSI A208.2-02; Grade MD, density 740kg/mn, thickness as indicated, urea-formaldehyde free.

- .3 Thermofused Melamine: to NEMA LD3 Grade VGL.
 - .1 High wear resistant thermofused melamine: equal or exceed 400 cycles (Minimum standard for HPL abrasion test).

2.2 PLASTIC LAMINATE FINISHING

- .1 Laminated plastic for flatwork: to NEMA LD 3-2000
 - .1 Type: General purpose.
 - .2 Grade: HGS
 - .3 Thickness: horizontal surfaces (HG) - 1.2 mm; vertical surfaces (VG) - 0.71 mm.
 - .4 Colour: integral colour throughout, except as indicated otherwise
 - .5 Pattern: solid except as indicated otherwise.
 - .6 Finish: furniture except as indicated otherwise.
 - .7 Colours and patterns: to be selected by the Departmental Representative from the manufacturer's full range.
- .2 Laminated plastic for backing sheet: to NEMA LD 3.
 - .1 Type: Backer.
 - .2 Grade: BKH.
 - .3 Size: not less than 0.5 mm thick or same thickness as face laminate.
 - .4 Colour: Manufacturers standard colour.
- .3 Laminated plastic for liner: to NEMA LD 3.
 - .1 Type: Cabinet Liner.
 - .2 Grade: CLS.
 - .3 Size 0.76 mm thick
 - .4 Colour: colours as selected by Departmental Representative from manufacturer's full range.
- .4 Laminated plastic adhesive: contact adhesive to CAN/CGSB-71.20, resorcinol resin adhesive to CSA 0112.7, polyvinyl adhesive to CSA 0112.4, two component epoxy thermosetting adhesive, acrylic type, low odor approved by plastic laminate manufacturer, suitable for substrate type to approval of Departmental Representative.

2.3 HARDWARE AND COMPONENTS

- .1 Hinges: 125° opening angle, nickel plated steel with self closing spring mechanism, fully concealed and adjustable, c/w mounting plates. Provide hinges for flush overlay casework design as indicated.
- .2 Drawer Slides: ball bearing, rail mount, full extension, 90 kg load rating. Clear zinc finish.
- .3 Door and Drawer Pulls: D-shaped pull, stainless steel with brushed finish, 96 mm centre- to-centre length.
- .4 Shelving Standards: Adjustable, recessed, steel with zinc finish, length as required with heavy duty metal shelf clips (4 per shelf).

- .5 Furring, Blocking, Shims, and Hanging Strips: Urea-formaldehyde free CSP plywood.
- .6 Cable Entry Pass-through Plugs: circular, 50 mm diameter unless indicated otherwise. Black colour. Provide in quantity equal to one/lineal metre of countertop.
- .7 Continuous Hinges: full height piano hinge, nickel finish, prepunched for fasteners, 40 mm wide, 0.8 mm thickness.
- .8 Cam Locks: chrome-plated cam locks, with keeper, latch length to suit application, keyed alike in each room but different between rooms, for panel thicknesses indicated. Provide keys in duplicate for each lock.
- .9 Sealant: in accordance with Section 07 92 00 - Joint Sealants, type silicone.

2.4 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 AWS.
- .3 When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trip for scribing and site cutting.
- .4 Provide cutouts 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. 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.
- .11 Edgebanding to be hot-melt applied in shop.

2.5 FABRICATION - COUNTERTOPS

- .1 Laminate-Clad Countertops:
 - .1 Countertop core: DFP or CSP plywood, thickness as indicated. Use Russian Birch plywood at countertops with sinks.
 - .2 Finish: General purpose HPL, HGS Grade. Colour and pattern as selected by Departmental Representative from unrestricted range.
 - .3 Provide backsplashes as indicated using particleboard.
 - .4 Provide hot-melt applied 3mm PVC edgebanding to exposed edges of core unless noted otherwise.

2.6 FABRICATION - CUSTOM CABINET UNITS

- .1 Fabricate in accordance with AWMAC AWS, 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 19 mm thick MDF.
 - .2 Unexposed Ends: Not less than 19 mm thick MDF.
 - .3 Tops and Bottoms: Not less than 19 mm thick MDF, fully supported and secured in rabbets in panels.
 - .4 Backs: Not less than 13 mm thick MCP fastened to machined rear edge of ends, top and bottom case partitions.
 - .5 Exterior Exposed Finish: HPL, HGL grade, colour and pattern selection by Departmental Representative.
 - .6 Interior Finish: HPL, liner grade, colour and pattern selection by Departmental Representative.
 - .7 Edgebanding: Laminate, colour match to exposed finish.
- .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 19 mm thick MDF.
 - .2 Exposed Finish: HPL, HGL grade, colour and pattern selected by Departmental Representative.
 - .3 Concealed Finish: to match exposed finish.
 - .4 Edgebanding: Laminate, colour match to exposed finish.
- .6 Drawers: box-type construction with applied drawer fronts.
 - .1 Sides, Backs and Sub-fronts: MDF, 13 mm thickness. Sub-front and back rabbeted into sides and secured with glue and mechanical fasteners. Fasten applied front to sub-front with mounting screws from interior of body.
 - .2 Finish: HPL, HGL grade, colour and pattern selection by Departmental Representative.
 - .3 Bottoms: Hardboard, 6 mm thickness. Set into rabbets in back, sides, and front.
- .7 Shelving: Melamine.
 - .1 Semi-exposed finish, shelves within cabinets: White melamine finish both faces of panel, laminate tape edgebanding all four sides, white colour.
 - .2 Exposed finish, exposed shelving without doors: HPL, HGL grade, colour and pattern selected by Departmental Representative. Colour-matching laminate 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, for applied resilient or hard tile base.
- .9 Corner Blocks: Particleboard or CSP plywood; glued and fastened in each of four top corners to maintain cabinet squareness and rigidity.

2.7 FINISHING

- .1 Finish in accordance with Section 09 91 23 - Interior Painting.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for architectural woodwork installation in accordance with manufacturer's instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 INSTALLATION

- .1 Do architectural woodwork to Quality Standards of AWMAC.
- .2 Install prefinished millwork at locations shown on drawings.
 - .1 Position accurately, level, plumb straight.
- .3 Fasten and anchor millwork securely.
 - .1 Supply and install heavy duty fixture attachments for wall mounted cabinets.
- .4 Use draw bolts 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 sealant in accordance with Section 07 92 00 - Joint Sealants.
- .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 written instructions.
- .9 Site apply laminated plastic to units as indicated.
 - .1 Adhere laminated plastic over entire surface.
 - .2 Make corners with hairline joints.

- .3 Use full sized laminate sheets.
- .4 Make joints only where approved by Departmental Representative.
- .5 Slightly bevel arises.
- .10 For site application, offset joints in plastic laminate facing from joints in core.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 .Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
 - .1 Clean millwork and cabinet work, inside cupboards and drawers and outside surfaces.
 - .2 Remove excess glue from surfaces.

3.4 PROTECTION

- .1 Protect millwork and cabinet work from damage until final inspection.
- .2 Protect installed products and components from damage during construction.
- .3 Repair damage to adjacent materials caused by architectural woodwork installation.

END OF SECTION