

## PART 1 - GENERAL

### 1.1 RELATED SECTIONS

- .1 Section 06 40 00 - Architectural Woodwork.
- .2 Section 07 21 16 - Blanket Insulation.

### 1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
  - .1 ASTM A 653/A653M-10, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot-Dip Process.
  - .2 ASTM E 84-13a, Standard Test Method for Surface Burning Characteristics of Building Materials.
  - .3 ASTM E 1333-10, Test Method for Determining Formaldehyde Concentrations in Air and Emissions Rates from Wood Products Using a Large Chamber.
  - .4 ASTM D 1761-06, Standard Test Methods for Mechanical Fasteners in Wood.
- .2 Canadian Standards Association (CSA)
  - .1 CSA B111-1974(R2003), Wire Nails, Spikes and Staples.
  - .2 CAN/CSA-G164-M92(R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.
  - .3 CSA O112 Series-M1977(R2006), CSA Standards for Wood Adhesives.
  - .4 CSA O121-08(R2013), Douglas Fir Plywood.
  - .5 CAN/CSA-O141-05(R2009), Softwood Lumber.
  - .6 CSA O151-09, Canadian Softwood Plywood.
- .3 National Lumber Grades Authority (NLGA)
  - .1 Standard Grading Rules for Canadian Lumber 2000.
- .4 National Fire Protection Association (NFPA):
  - .1 NFPA 255 Standard Test Method for Surface Burning Characteristics of Building Materials.

### 1.3 QUALITY ASSURANCE

- .1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood and wood based composite panels in accordance with CSA standards and Canadian Panel Association (CPA).
- .3 Plywood identification: by grade mark in accordance with applicable CSA standards, Council of Forest Industries (COFI) certified.
- .4 Fire retarder treated plywood: certified test report showing compliances with specified performance characteristics and physical properties. Include in

test report certification that fire retardant solution does not contain ammonium phosphate.

#### 1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management System.
- .2 Separate metal, plastic, wood and corrugated cardboard-packaging in accordance with the Waste Management Plan and place in designated areas for recycling.
- .3 Do not burn scrap at the project site.
- .4 Fold up metal banding, flatten, and place in designated area for recycling.

### PART 2 - PRODUCTS

#### 2.1 FRAMING MATERIALS

- .1 Furring, blocking, nailing strips, grounds, rough bucks, curbs, and sleepers:
  - .1 S2S is acceptable.
  - .2 Board sizes: "Standard" or better grade.
  - .3 Dimension sizes: "Standard" light framing or better grade.

#### 2.2 PANEL MATERIALS

- .1 Plywood, OSB and wood based composite panels:
  - .1 CAN/CSA-O325.0, exterior grade, Canply/COFI certified.

#### 2.3 ACCESSORIES

- .1 General purpose adhesive: to CSA 0112 Series.
- .2 Nails, spikes and staples: to CSA B111.

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- .1 Store wood products off the ground and protected from weather.

### 3.2 INSTALLATION

- .1 Comply with requirements of NBC 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 furring and blocking as required to space-out and support casework, cabinets, wall and ceiling finishes, facings, siding electrical equipment mounting boards, and other work as required.
- .5 Align and plumb faces of furring and blocking to tolerance of 1:600.

### 3.3 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.

## PART 1 - GENERAL

### 1.1 RELATED REQUIREMENTS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 06 40 00 - Architectural Woodwork.
- .3 Section 08 71 00 - Door Hardware.
- .4 Section 09 91 23 - Interior Painting.

### 1.2 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
  - .1 Architectural Woodwork Quality Standards, 1st edition, 2009.
- .2 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-11.3-M87, Hardboard.
- .3 CSA International
  - .1 CSA B111-74(R2003), Wire Nails, Spikes and Staples.
  - .2 CSA O121-08(R2013), Douglas Fir Plywood.
  - .3 CSA O141-05(R2009), Softwood Lumber.
  - .4 CSA O151-09, Canadian Softwood Plywood.
  - .5 CSA O153-M1980(R2008), Poplar Plywood.
- .4 National Lumber Grades Authority (NLGA)
  - .1 Standard Grading Rules for Canadian Lumber 2010.
- .5 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
  - .1 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.
- .6 Underwriters Laboratories of Canada (ULC)
  - .1 CAN/ULC-S104-10, Standard Method for Fire Tests of Door Assemblies.
  - .2 CAN/ULC-S105-09, Standard Specification for Fire Door Frames.

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|---|----|--|
| 1.3 ACTION AND INFORMATIONAL SUBMITTALS | .1 | Submit in accordance with Section 01 33 00 - Submittal Procedures.   |
|   | .2 | Shop Drawings: <ul style="list-style-type: none"> <li>.1 Indicate details of construction, profiles, jointing, fastening and other related details.</li> <li>.2 Indicate materials, thicknesses, finishes and hardware.</li> </ul>   |
| 1.4 DELIVERY, STORAGE AND HANDLING      | .1 | Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.  |
|   | .2 | Storage and Handling Requirements: <ul style="list-style-type: none"> <li>.1 Store materials off ground indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.</li> <li>.2 Store and protect wood products from nicks, scratches, and blemishes.</li> <li>.3 Replace defective or damaged materials with new.</li> </ul> |
|   | .3 | Develop Construction Waste Management Plan Waste Reduction Workplan related to Work of this Section.   |
|   | .4 | Packaging Waste Management: remove for reuse of pallets, crates, padding, and packaging materials as specified in Construction Waste Management Plan Waste Reduction Workplan in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.   |

## PART 2 - PRODUCTS

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|--------------------|----|--|
| 2.1 MATERIALS      | .1 | Softwood lumber: S4S, moisture content 19% or less in accordance with following standards: <ul style="list-style-type: none"> <li>.1 CSA O141.</li> <li>.2 NLGA Standard Grading Rules for Canadian Lumber.</li> <li>.3 Machine stress-rated lumber is acceptable.</li> <li>.4 Hardwood lumber: moisture content 8% or less. Select or better grade; white wood only. (SAP hard maple).</li> </ul> |
| 2.2 PANEL MATERIAL | .1 | Douglas fir plywood (DFP): to CSA 0121, standard construction, exterior grade, CanPly/COFI certified.  |

- .2 Canadian softwood plywood (CSP): to CSA 0151, Standard construction, exterior grade, CanPly/COFI certified.
- .3 All panel material to contain no added urea formaldehyde when tested in accordance with ASTM E1333.

## 2.3 ACCESSORIES

- .1 Nails and staples: to CSA B111; galvanized to CAN/CSA-G164 for exterior work, interior humid areas and for treated lumber; plain finish elsewhere.
- .2 Wood screws: plain steel, type and size to suit application.
- .3 Splines: wood.
- .4 Adhesive and Sealants: as recommended by manufacturer.

## 2.4 FINISHES

- .1 Clear finish on hardwood wood surfaces where noted.
  - .1 Base coat of catalyzed sealing lacquer.
  - .2 Two finish coats of catalyzed top coat lacquer.
    - .1 Approved products.
      - .1 ML Campbell.
      - .2 Sadolin.
  - .3 Sand between all coats.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- .1 Do finish carpentry to custom grade Quality Standards of (AWMAC).
- .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.

### 3.2 CONSTRUCTION

- .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 smooth cut hole and plug with wood plug to match material being secured.

.4 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.

.2 Standing and running trim:

.1 Butt and cope internal joints to make snug, tight, joint. Cut right angle joints of casing and base with mitred joints.

.2 Fit backs of carpentry snugly to wall surfaces to eliminate cracks at junction of base and casing with walls.

.3 Make joints where necessary using a 45 degrees scarf type joint.

.3 Maple cap at Lunchroom 114.

.1 Install cap at location indicated.

.2 Make joints hair line.

.4 Maple sills and aprons at new windows:

.1 Provide solid maple sill and apron.

.2 All detail to match existing.

### 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.

.3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

.1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### 3.4 PROTECTION

.1 Protect installed products and components from damage during construction.

.2 Repair damage to adjacent materials caused by finish carpentry installation.

## PART 1 - GENERAL

### 1.1 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 06 10 00 - Rough Carpentry - blocking and plywood blocking.
- .3 Section 07 92 00 - Joint Sealing.
- .4 Section 09 30 13 - Ceramic Tiling.
- .5 Section 09 91 23 - Interior Painting.
- .6 Division 26 - Electrical Power Signal, data wiring.

### 1.2 REFERENCES

- .1 American National Standards Institute (ANSI)
  - .1 ANSI A208.1-09, Particleboard.
  - .2 ANSI A208.2-09, Medium Density Fiberboard (MDF) for Interior Applications.
  - .3 ANSI/HPVA HP-1-10, Standard for Hardwood and Decorative Plywood.
- .2 American Society for Testing and Materials (ASTM):
  - .1 ASTM E 1333-10, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates From Wood Products Using a Large Chamber.
  - .2 ASTM D 2832-92(R2011), Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.
  - .3 ASTM D 5116-10, 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 Quality Standards Illustrated, 8th edition, Version 1.0 (2009).
- .4 Canadian General Standards Board (CGSB)
  - .1 CAN/CGSB-71.20-M88, Adhesive, Contact, Brushable.
- .5 Canadian Standards Association (CSA):



- .1 CSA B111-74(R2003), Wire Nails, Spikes and Staples.
- .2 CSA O112.10-08, Evaluation of Adhesives for Structural Wood Products (Limited Moisture Exposure).
- .3 CSA O121-08(R2013), Douglas Fir Plywood.
- .4 CSA O141-05(R2009), Softwood Lumber.
- .5 CSA O151-09, Canadian Softwood Plywood.
- .6 CSA O153-M1980(R2008), Poplar Plywood.
- .7 CSA 0115-M82(R2001) - Hardware and Decorative Plywood.

- .6 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
  - .1 Material Safety Data Sheets (MSDS).
- .7 National Electrical Manufacturers Association (NEMA)
  - .1 ANSI/NEMA LD-3-05, High-Pressure Decorative Laminates (HPDL).
- .8 National Lumber Grades Authority (NLGA)
  - .1 Standard Grading Rules for Canadian Lumber 2010.

### 1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop Drawings:
  - .1 Indicate details of construction, profiles, jointing, fastening, working surface seams 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.
- .3 Samples:
  - .1 Submit duplicate samples approximately 150mm x 150mm, shop finished illustrating cabinet finishes.
  - .2 Submit duplicate samples of laminated plastic for colour selection.
  - .3 Submit cut sheets of each hardware item. Actual samples may be requested by Departmental Representative.
  - .4 Submit duplicate samples 150mm x 150mm shop finished hardwood to match existing wood doors and frames.
- .4 Low-Emitting Materials:
  - .1 A listing of adhesives and sealants and paints

and coatings used in building, shall be available upon request and comply with Green Seal VOC chemical component limits or restrictions requirements.

.2 A listing of composite wood products used in building, shall be available on request with documentation from the manufacturer stating that they contain no added urea-formaldehyde resins.

#### 1.4 QUALITY ASSURANCE

- .1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood, particleboard, wood based composite panels to CSA and ANSI standards.
- .3 Any reference to custom grade in this section shall be as defined in the AWMAC Quality Standards.
- .4 The subcontractor for this section is responsible for all field dimensions on site that will affect the work.
- .5 Mock-ups:
  - .1 Shop prepare one base cabinet unit wall cabinet counter top shelving unit, complete with hardware and shop applied finishes, and install where directed by Consultant
  - .2 Allow 48 hours for inspection of mock-up by Departmental Representative before proceeding with Work.
  - .3 When accepted, mock-up will demonstrate minimum standard for Work.
  - .4 Do not proceed with work prior to receipt of written acceptance of mock-up by Departmental Representative.
  - .5 Mock-up may remain as part of finished work.

#### 1.5 QUALITY CONTROL

- .1 Work of this Section shall be manufactured and installed to custom grade AWMAC Quality Standards, unless otherwise specified.
- .2 Work that does not meet the AWMAC Architectural Woodwork Standards, as specified, shall be replaced, reworked and/or refinished by the architectural woodwork contractor to the approval of the Departmental Representative at no additional cost to the Owner.

#### 1.6 DELIVERY,

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.

## STORAGE AND HANDLING

- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
  - .1 Protect millwork against dampness and damage during and after delivery.
  - .2 Store millwork in ventilated areas, protected from extreme changes of temperature or humidity.
- .3 Storage and Handling Requirements:
  - .1 Store materials off ground 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.
  - .4 Refer to AWMAC AWS Section 2 - Care and Storage.

## PART 2 - PRODUCTS

### 2.1 FINISHED LUMBER

- .1 Softwood lumber: unless specified otherwise, S4S, moisture content 11% or less in accordance with following standards:
  - .1 AWMAC custom grade, moisture content as specified.
- .2 Machine stress-rated lumber is acceptable for all purposes.
- .3 Hardwood lumber: moisture content 11% or less in accordance with following standards:
  - .1 AWMAC custom grade, moisture content as specified.

### 2.2 PANEL PRODUCTS

- .1 Poplar plywood (PP): to CSA O153, standard construction.
  - .1 Plywood resin to contain no added urea-formaldehyde.
- .2 Interior mat-formed wood particleboard: to ANSI/NPA A208.1.
  - .1 Particleboard resin to contain no added urea-formaldehyde.
- .3 Medium Density Fibreboard (MDF) core: to ANSI A208.2, Grade thickness as indicated on drawings, density 769

kg/m<sup>2</sup>.

.1 Medium density fibreboard performance requirements to: ANSI A208.2.

.2 MDF resin to contain no added urea-formaldehyde.

## 2.3 PLASTIC LAMINATE

.1 Laminated plastic for post-forming work:

.1 To NEMA LD3, Grade HGL, based on solid colour range with furniture finish.

.2 Post form profile Italo Plus edge and cove backsplash.

.2 Laminated plastic backing sheet: Grade BK, same thickness and colour as face laminate.

.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 All cabinets to be 19mm material unless otherwise noted.

.3 All cabinet and drawer interiors to be white.

## 2.4 EDGE BANDING MATERIALS

.1 For thermally fused laminate (MCP):

.1 All exposed edges: 3mm PVC, colour and through pattern to match face panel, unless noted otherwise.

.2 All semi-concealed edges only (ie: front edges of boxes and shelves behind doors): 1mm PVC, colour to match face panel, unless noted otherwise.

.3 Edge banding to be applied using an edge banding machine with heat and pressure.

## 2.5 HARDWOOD TRIM

.1 Execute details as shown on drawings.

.2 Scribe joints to profiles as detailed on drawings for continuous appearance.

.3 Countersink and plug screw heads with hardwood plugs finished to match existing.

## 2.6 SEALANTS ADHESIVE COATINGS

.1 Laminated plastic adhesive:

.1 Refer to laminate manufacturer's technical manuals for correct adhesive.

.2 Wood Finishes: VOC limit to comply with Green Seal certification.

## 2.7 GLASS

- .1 For upper casework doors in Coffee 103A and Lunchroom 114:
  - .1 Tempered or laminated glass panel inserts, minimum 4mm thick in upper cabinets as shown in Details Dwg. A12.
  - .2 Include frosted film over full glass installed on the back of the panel. Install the film smooth and flat without rippling, bubbles or pinpoints.

## 2.8 MANUFACTURED UNITS

- .1 Casework:
  - .1 Fabricate caseworks to AWMAC custom grade.
  - .2 Case bodies (ends, divisions and bottoms).
    - .1 Particle board laminated with thermofused melamine 19mm thick unless otherwise noted on drawings.
  - .3 Backs:
    - .1 Particle board laminated with thermofused melamine 19mm thick unless otherwise noted on drawings.
  - .4 Shelving:
    - .1 Particleboard, laminated with thermofused melamine 19mm thick.
    - .2 All shelves to have continuous 1mm PVC edging to match melamine.
  - .5 All case interior surfaces for white.
- .2 Drawers:
  - .1 Fabricate drawers to AWMAC custom grade supplemented as follows:
  - .2 Sides and Backs: melamine panel, 12.7mm thick.
  - .3 Bottoms: melamine panel, 12.7 mm thick.
  - .4 Fronts: particleboard laminated in plastic laminate for front face with backing sheet for back face, 19mm thick, colour to be match lower doors as selected by Consultant.
  - .5 All drawer interiors for white unless otherwise noted on drawings.
  - .6 All exposed edges for 3mm edge banding, matching face laminate.
- .3 Lower Casework Doors:
  - .1 Fronts: particleboard laminated in plastic laminate for front face and back faces, 19mm thick, colour to be selected by Consultant.
  - .2 All exposed edges for 3mm edge banding, matching face laminate
- .4 Upper casework doors - Coffee 103A, Lunchroom 114, Corridor 121:
  - .1 Size as shown in drawings.
  - .2 Include glass insert complete with frosted film where shown in drawings. (Lunchroom 114 and Coffee 121

only).

.3 Laminate face and backs to match countertop as selected by Consultant.

.4 Lift up mechanism opening system suitable for door dimension and weight. System to allow door to be lifted vertically above case opening with minimal front clearance and clear the full height of the case opening in the open position. System to have mechanisms to allow door to be easily lifted and closed in a smooth operation and to secure the door in the open position until closed.

## 2.9 FABRICATION

- .1 Set nails and countersink screws apply plain wood filler to indentations, sand smooth and leave ready to receive finish.
- .2 Shop install cabinet hardware for doors, shelves and drawers. Install recessed shelf standards unless noted otherwise.
- .3 Shelving to be adjustable unless otherwise noted.
- .4 Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes and other fixtures.
- .5 Shop assemble work for delivery to site in size easily handled and to ensure passage through building openings.
- .6 Obtain governing dimensions before fabricating items which are to accommodate or abut appliances, equipment and other materials.
- .7 Ensure adjacent parts of continuous laminate work match in colour and pattern.
- .8 Veneer laminated plastic to core material in accordance with adhesive manufacturer's instructions. Ensure core and laminate profiles coincide to provide continuous support and bond over entire surface. Use continuous lengths up to 3000 mm. Keep joints 600 mm from sink cutouts.
- .9 Form shaped profiles and bends as indicated, using post forming grade laminate to laminate manufacturer's instructions.
- .10 Use straight self-edging laminate strip for flatwork to cover exposed edge of core material. Chamfer exposed edges uniformly at approximately 20 degrees. Do not mitre laminate edges.

## 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 Inform General Contractor of unacceptable conditions immediately upon discovery.
  - .2 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 Install architectural woodwork to AWMAC, custom grade.
- .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 and adjacent back splash wall finish, apply small bead of sealant in accordance with Section 07 92 00 - Joint Sealing.
- .7 Fit hardware accurately and securely in accordance with manufacturer's written instructions.
- .8 Refer to electrical and millwork detail drawings for locations of electrical outlets and cables in case work. Provide cut-outs in a minimal size to meet requirements and neat and sanded smooth.

### 3.3 HARDWARE AND COMPONENTS

- .1 Hinges:
  - .1 Concealed door hinges:
    - .1 Concealed hinges for overlay doors, 110 degree opening with integral horizontal and vertical adjustment; self-closing; for full-overlay doors.
    - .2 Finish: manufacturer's standard bright nickel.
    - .3 Standard of acceptance:
      - .1 Dumatic Hinges by Häfele America Co.
  - .2 Pivot door hinges:
    - .1 Concealed pivot hinges, smooth drawn 180 degree opening; length to suit door size.
    - .2 Quantity: two (2) per door.
    - .3 Standard of acceptance: pivot hinges by Häfele America Co.
  - .3 Invisible door hinges:
    - .1 Concealed hinges, 180 degree opening.
    - .2 Finish: polished chrome.
    - .3 Quantity: provide in sizes and quantities as recommended by manufacturer to suit door thicknesses and sizes.
    - .4 Standard of acceptance: Soss Invisible Hinges by Universal Industrial Products Company.
- .2 Drawer slides:
  - .1 Description: ball bearing slides, side mounted.
  - .2 Load capacity: 50 pounds per pair.
  - .3 Extension: full extension.
    - .1 Bins and file drawers: three section, full extension.
  - .4 Finish: manufacturer's standard electro-plated zinc.
  - .5 Standard of acceptance:
    - .1 Accuride.
- .3 Pulls:
  - .1 Doors and drawers for all casework unless otherwise specified:
    - .1 Contemporary Stainless Steel Handle Pull; centre to centre- 7 9/16"; handle diameter 25/64".
    - .2 Standard of acceptance: Richelieu 2102 Product # BP2102192170.
    - .3 Pulls for sliding doors for Coat Closet 106 and Storage 108:
      - .1 Recessed metal rectangular designed to set at door edge;
      - .2 Satin aluminum 485l.x28w.x19d. mm.
      - .3 Standard of acceptance: Richelieu 616809450.
- .4 Shelf support pilaster standards and clips:



- .1 Metal pilaster standards recessed in cabinet case, 15mm wide, length to suit.
- .2 Metal shelf clips compatible with 15mm recessed standards.
- .3 Standard of acceptance: Richelieu CD2562G; Richelieu 2552G.

- .5 Silencers: clear, soft vinyl buttons.
- .6 Miscellaneous hardware: provide other required hardware as indicated for complete and proper operation and installation of units.

### 3.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 10 10 - General Instruction.
  - .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 10 10 - General Instruction.
  - .1 Clean millwork and cabinet work inside cupboards and drawers and outside surfaces.
  - .2 Remove excess glue from surfaces.
- .3 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

### 3.5 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.