

1 ASSEMBLY - GENERAL

- 1.1 The work of this section includes the provision of all design, labour, materials, equipment and services required to fabricate and install interior doors as required for a complete project. The work includes, but is not necessarily limited to, the items referenced herein:
- 1.1.1 Laminated plastic
 - 1.1.2 Architectural casework.
- 1.2 Provision of architectural casework will be provided by Cash Allowance. Refer to space data sheets for approximate dimensions and preliminary requirements.

2 ASSEMBLY DESIGN CRITERIA

- 2.1 Millwork items include the following:
- 2.1.1 Lobby display cases.
 - 2.1.2 Washroom vanities.
 - 2.1.3 Kitchenettes in Office areas.
 - 2.1.4 Change room benches.
 - 2.1.5 Public telephone cabinets.
 - 2.1.6 Public area benches and seating.
 - 2.1.7 Items identified in space data sheets.

3 ASSEMBLY COMPONENTS

3.1 COMPONENT

3.1.1 **General:**

- 3.1.1.1 Submittals: Submit samples in accordance with Section 01340 - Shop Drawings, Product Data, Samples, and Mock-ups. Submit duplicate samples: sample size 600 x 600mm or 100mm long unless required otherwise, duplicate colour samples of laminated plastic for colour selection, laminated plastic joints, edging, cutouts and post formed profiles.
- 3.1.1.2 Submittals: Submit shop drawings in accordance with Section 01340 - Shop Drawings, Product Data, Samples, and Mock-ups. Indicate details of construction, profiles, jointing, fastening and other related details. Indicate all materials, thickness, finishes and hardware. Indicate locations of all service outlets in casework, typical and special installation conditions, and all connections, attachments, anchorage and location of exposed fastenings.

- 3.1.1.3 Mock-up: Submit mock-ups in accordance with Section 01340 - Shop Drawings, Product Data, Samples, and Mock-ups. Shop prepare one base cabinet unit, wall cabinet, counter top and shelving unit complete with hardware and shop applied finishes, and install on project at designated location for Owner's review.
- 3.1.1.4 Warranties: *[Design Builder]* hereby warrants that laminated plastic work will not warp or delaminate, but for 2 years.
- 3.1.1.5 Operations & Maintenance Manuals: provide material and product data for incorporation into Section 01730.
- 3.1.2 **Design:**
 - 3.1.2.1 Refer to space data sheets for millwork requirements, under Cash Allowance.
 - 3.1.2.2 Provide hardwood window sills throughout, included in the Contract.
- 3.1.3 **Materials/Finishes:**
 - 3.1.3.1 Softwood lumber: unless specified otherwise, S4S, moisture content 15% or less in accordance with following standards:
 - 3.1.3.1.1 *[CSA 0141-1970]*.
 - 3.1.3.1.2 NLGA Standard Grading Rules for Canadian Lumber, *[1987]*.
 - 3.1.3.1.3 Maximum moisture content of 7% for interior work.
 - 3.1.3.1.4 Select for paint finish, pine species to AWMAC custom grade.
 - 3.1.3.2 Hardwood lumber: moisture content 7% or less in accordance with following standards:
 - 3.1.3.2.1 Maple wood to National Hardwood Lumber Association (NHLA), *[January 1982]*. Select species to AWMAC premium grade, for stain finish.
 - 3.1.3.2.2 Match species and cut specified for veneers.
 - 3.1.3.3 Panel Materials:
 - 3.1.3.3.1 Flat sliced veneers from architectural grade flitches to provide uniform grain pattern and colour throughout, free of dark streaks and blemishes. Sharp variation of grain patterns and colour between adjacent jointed pieces is not acceptable.
 - 3.1.3.3.2 Douglas fir plywood: to *[CSA 0121-M1978]* Exterior Grade; G1S and G2S.
 - 3.1.3.4 Plywood cores:

- 3.1.3.4.1 Veneer core: to [CSA 0115-M1982], minimum five (5) plies.
- 3.1.3.4.2 Particleboard: to [CAN 3-0188.1-M78], minimum density of 720kg/m³ Grade "R".
- 3.1.3.5 Melamine finish boards:
 - 3.1.3.5.1 Solid colour, to NEMA Standard LQ1, Decorative Boards.
 - 3.1.3.5.2 Core: particleboard to [CAN 3-0188.1-M78], minimum density of 720kg/m³ Grade "R".
 - 3.1.3.5.3 Hardboard: to [CGSB 11-GP-3M], Type 2, minimum density 496kg/m³, (tempered) 6mm thick or as required.
- 3.1.3.6 Adhesives: to applicable CSA Standards and manufacturer's recommendations.
- 3.1.3.7 Sealant: silicone to [CAN2-19.0-M77].
- 3.1.3.8 Stainless steel: to [ASTM A167], Type 304, #4 finish, 1.5mm thickness.
- 3.1.3.9 Aluminum profiles, plate and extrusions, aluminum alloy AA6061-T6, clear anodized finish AA-M12-C22-A41.
- 3.1.3.10 Steel brackets and supports: as required.
- 3.1.3.11 Protective collars for wiring: stainless steel collars to suit diameter of holes with rounded lip or rim to cover edges of drilled openings and to protect wiring.
- 3.1.3.12 Glazing: 6mm tempered glass with ground edges.
- 3.1.3.13 Fabricate caseworks to AWMAC conventional construction, premium grade.
- 3.1.3.14 Cabinet doors and drawers to be AWMAC Type flush overlay premium grade.
- 3.1.3.15 Countertops: laminated plastic or stainless steel finishes where required.
- 3.1.3.16 Finishes:
 - 3.1.3.16.1 Veneer or solid wood for exposed and semi-exposed surfaces.
 - 3.1.3.16.2 Laminated plastic for exposed and semi-exposed surfaces.
 - 3.1.3.16.3 Laminated plastic for inside of cupboards and drawers.
- 3.1.3.17 Doors:

- 3.1.3.17.1 For paint finish: 19mm paint grade, birch faced particle core plywood with 10mm x 19mm hardwood edging at exposed edges.
- 3.1.3.17.2 For varnish finish: 19mm maple veneered particle core plywood with 10mm x 19mm maple edging at exposed edges.
- 3.1.3.18 Drawers:
 - 3.1.3.18.1 Fronts for paint finish: 19mm birch faced veneer core plywood with 10mm x19mm hardwood edging.
 - 3.1.3.18.2 Fronts for varnish finish: 19mm maple veneered core plywood with 10mm x19mm maple edging.
 - 3.1.3.18.3 Sides and back, 12.5mm thick birch faced plywood.
 - 3.1.3.18.4 Bottoms: up to 350mm - 6mm hardboard, over 350mm 12.5mm thick masonite. Drawers shall slide on nylon roller track/ House backs into sides and fronts.
- 3.1.3.19 Shelves with interior gables:
 - 3.1.3.19.1 For paint finish: 19mm birch faced veneer core plywood with 10mm x19mm hardwood edging.
 - 3.1.3.19.2 For varnish finish: 19mm maple veneered core plywood with 10mm x19mm maple edging.
 - 3.1.3.19.3 Fixed, 19mm, blind housed into gables.
 - 3.1.3.19.4 Adjustable, 19mm, supported on recessed pilasters and clips.
- 3.1.3.20 End Gables, tops and bottoms of upper cabinets:
 - 3.1.3.20.1 For paint finish: 19mm birch faced veneer core plywood with 10mm x19mm hardwood edging.
 - 3.1.3.20.2 For varnish finish: 19mm maple veneered core plywood with 10mm x19mm maple edging.
- 3.1.3.21 Backs:
 - 3.1.3.21.1 Semi-exposed, 12.5mm.
 - 3.1.3.21.2 Exposed, 19mm.
- 3.1.3.22 Edge Banding Wood Veneer Casework:

- 3.1.3.22.1 Visible edges of veneer finished casework, e.g.: shelves, drawers, doors, gables, and etc., shall be AWMAC premium grade solid wood banding to match face veneer, to AWMAC edge banding detail Type 2, but minimum 10mm thick premium grade solid wood banding to match face veneer, to AWMAC edge banding detail Type 1.
- 3.1.3.23 Base: cabinets set onto floor shall have a minimum 75mm recessed base x 100mm high.
- 3.1.3.24 Cabinet Hardware:
- 3.1.3.24.1 Shall comply with *[CAN/CGSB 69.25-M90]* *[ANSI/BHMA A156.9-1988]* cabinet hardware.
- 3.1.3.24.2 Hardware as follows:
- 3.1.3.24.3 Hinges: B01602 - 2 required per door up to 950mm high. Supply 1 additional hinge for each additional 406.4mm of height or fraction thereof.
- 3.1.3.24.4 Piano hinge: 38.1mm open width x lengths as required, nickel plated.
- 3.1.3.24.5 Door/drawer pulls: continuous clear anodized extruded finger pull rail full width of drawers/doors, *[Richelieu 3184 Model]*, mounted to top of door/drawer fronts.
- 3.1.3.24.6 Drawer slides: B05051 - full extension, positive stop.
- 3.1.3.24.7 Acceptable material: *[Knape & Vogt 31429]* sized to suit.
- 3.1.3.24.8 Shelf rests: B04013 - nickel plated. Acceptable material: *[Knape & Vogt #346]* complete with #119 rubber cushion.
- 3.1.3.24.9 Recessed pilaster: B04071 - zinc plated x length to suit.
- 3.1.3.24.10 Clips: B04081 - zinc plated.
- 3.1.3.24.11 Wheel castors: heavy duty. 101mm swivel plate complete with brack.
- 3.1.3.24.12 Sliding glass door track: acceptable material: *[Roll-It "Rollwell"]* length to suit.
- 3.1.3.24.13 Glass door lock: Acceptable Material: *[Roll-It #BC211]*.
- 3.1.3.24.14 Finger pull: threaded, two-piece screw together type, chrome finish. Acceptable material: *[Knape & Vogt #836]*.
- 3.1.3.24.15 Drawer lock: E07041 - pin tumbler. Brass material. Dull chrome finish.

- 3.1.3.24.16 Door lock: E07121 - pin tumbler. Brass material. Dull chrome finish. Drawer and door locks to be keyed alike in each room and keyed in different rooms.
- 3.1.3.24.17 D Pulls; Rod type, 7.93mm dia x 101.6mm centres, stainless steel 630.
- 3.1.3.25 Laminated Plastic:
 - 3.1.3.25.1 Laminated plastic for flatwork: to *[CAN3-A172-M79]*, Grade Commercial, 2.5mm thick; based on solid colour range with matt finish.
 - 3.1.3.25.2 Laminated plastic for post forming work: to *[CAN3-A172-M79]*, Grade PF, Type 2, 1.3mm thick, based on solid colour range with matt finish.
 - 3.1.3.25.3 Laminated plastic backing sheet: supplied by same manufacturer as facing sheet; not less than 0.5mm thick and same thickness and colour as face laminate. Sanded one side.
 - 3.1.3.25.4 Plywood core: to *[CSA 0153-M1980]* solid two sides, 19mm thick.
 - 3.1.3.25.5 Particleboard core: to *[CAN3-0188.1-M78]*, Grade H, sanded faces, of thickness indicated.
 - 3.1.3.25.6 Laminated plastic adhesive: contact adhesive to *[CGSB 71-GP-20M]*.
 - 3.1.3.25.7 Sealer: Water-resistant sealer or glue acceptable to laminate manufacturer.
 - 3.1.3.25.8 Draw bolts and splines: as recommended by fabricator.
 - 3.1.3.25.9 Colours: allow for a total of 8 colours to be selected from manufacturer's standard range.
 - 3.1.3.25.10 Standing and running trim: custom grade, solid stock maple species and maple veneer, premium grade.
- 3.1.3.26 Interior window sills: solid maple.
- 3.1.4 **Fabrication/Installation:**
 - 3.1.4.1 Set nails and countersink screws, apply plain wood filler to indentations, sand smooth and leave ready to receive finish.
 - 3.1.4.2 Shop install cabinet hardware for doors, shelves and drawers. Recess shelf standards.

- 3.1.4.3 Shelving to cabinetwork to be adjustable unless otherwise noted.
- 3.1.4.4 Provide cutouts for plumbing fixtures, inserts, appliances, outlet boxes and other fixtures.
- 3.1.4.5 Install prefinished millwork positioned accurately, level, plumb straight.
- 3.1.4.6 Fasten and anchor millwork securely. Provide heavy duty fixture attachments for wall mounted cabinets.
- 3.1.4.7 Use draw bolts in countertop joints.
- 3.1.4.8 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.
- 3.1.4.9 At junction of plastic laminate counter back splash and adjacent wall finish, apply small bead of sealant.
- 3.1.4.10 Apply water resistant building paper over wood framing members in contact with masonry or cementitious construction.
- 3.1.4.11 Fit hardware accurately and securely in accordance with manufacturer's directions.
- 3.1.4.12 Where holes are required for countertop equipment cords, ensure hole is of a diameter suitable to pass through the connecting cord. These holes are to be protected with protective collars for wiring.
- 3.1.4.13 Secure window sills using concealed fasteners or finishing nails. Fill nail holes with filler matching wood in colour.

End of Section