PART 1 GENERAL

1.1 RELATED SECTIONS

- .1 Section 06 40 23.13 Plastic Laminate Finishing for Interior Architectural Woodwork
- .2 Section 09 91 00 Painting

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM):
 - .1 ASTM F1667-13 Standard Specification for Driven Fasteners: Nails, Spikes, and Staples
 - .2 ASTM A123 / A123M-13 Standard Specification for Zinc (Hot-Dip Galvanized)
 Coatings on Iron and Steel Products
- .2 Canadian Standards Association (CSA):
 - .1 CSA O121-08 (R2013) Douglas Fir Plywood
 - .2 CSA O141-05 (R2009) Softwood Lumber
 - .3 CSA O151-09 Canadian Softwood Plywood
 - .4 CSA O153-13 Poplar Plywood
- .3 American National Standards Institute (ANSI):
 - .1 ANSI/HPVA HP-1-2009 American National Standard for Hardwood and Decorative Plywood
 - .2 ANSI A208.1-2009 Particleboard
 - .3 ANSI A208.2-2009 Medium Density Fiberboard (MDF) for Interior Applications
- .4 Architectural Woodwork Manufacturers Association of Canada (AWMAC):
 - .1 Architectural Woodwork Standards 2009
- .5 National Lumber Grades Authority (NLGA):
 - .1 Standard Grading Rules for Canadian Lumber (2014 Edition)
- .6 National Hardwood Lumber Association (NHLA):

- .1 Rules for the Measurement & Inspection of Hardwood & Cypress (2011, Version 1.1)
- .7 CAN/ULC-S104-10 Standard Method for Fire Tests of Door Assemblies
- .8 CAN/ULC-S105-09 Standard Specification for Fire Door Frames
- .9 CAN/CGSB-11.3-M87 Hardboard

1.3 SAMPLES

.1 Submit samples in accordance with Section 01 33 00 – Submittals.

1.4 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 Submittals.
- .2 Indicate details of construction, profiles, jointing, fastening and other related details.
- .3 Indicate all materials, thickness, finishes and hardware.

1.5 PRODUCT DELIVERY AND STORAGE

- .1 Protect materials against dampness during and after delivery.
- .2 Store materials in ventilated areas, protected from extreme changes of temperature or humidity.

PART 2 PRODUCTS

2.1 LUMBER MATERIAL

- .1 Softwood lumber: unless specified otherwise, S4S, moisture content 19% or less, in accordance with the following standards.
 - .1 CSA O141NLGA Standard Grading Rules for Canadian Lumber (2014 Edition)
 - .2 AWMAC premium grade, moisture content as specified.
- .2 Machine stress-rated lumber is acceptable for all purposes.

2.2 PANEL MATERIAL

- .1 Douglas Fir plywood (DFP): to CSA O121, standard construction.
- .2 Canadian Softwood plywood (CSP): to CSA O151, standard construction.
- .3 Poplar plywood (PP): to CSA O153, standard construction.

- .4 Interior mat-formed wood particleboard: to ANSI A201.1
- .5 Hardboard: to CAN/CGSB-11.3.
- .6 Medium density fibreboard (MDF): to ANSI A208.2, density 769 kg/m³.
- .7 Melamine overlaid panelboards:
 - .1 Melamine overlay, heat and pressure laminated with phenolic resin to 12.7 mm thick particleboard core.
 - .2 Overlay bonded to both faces where exposed two (2) sides and when panel material require surface on one (1) side only, reverse side to be overlaid with a plain (buff) balancing sheet.
 - .3 Edge finishing: matching melamine and polyester overlay edge strip with self-adhesive.

2.3 ACCESSORIES

- .1 Nails and staples: to ASTM F1667; galvanized to ASTM A123 / A123M for exterior work, interior humid areas and for treated lumber, plain finish elsewhere.
- .2 Wood screws: to CSA B35.4 stainless steel, type and size to suit application.
- .3 Splines: wood.
- .4 Adhesive: recommended by manufacturer.
- .5 Hardware
 - .1 Cabinet Hardware: Products listed below are a standard of acceptance. Products by other manufacturers of equal quality and similar appearance may also be provided subject to review and approval by Consultant.
 - .1 Hinges for 19 mm door: Blum 91-650, 170° with self-closing spring.
 - .2 Hinges for 35 mm doors: Hager 1279, 76 x 76 mm.
 - .3 Door and drawer pull: GSH 302 x 100 mm, CTC 7.5 mm outside diameter brushed stainless steel.
 - .4 Drawer slides: full extension for 45 kg load @ 500 mm, by K & V or Accuride.
 - .5 Drawer locks: Olympus 078 or National Cabinet Lock C8702 or Corbin CC1 02066, keyed as directed by Consultant. Door locks shall conform to keying schedule prepared by Hardware Consultant.
 - .6 Cabinet locks: Olympus 078 or National Cabinet Lock C8702 or Corbin CCL 02067, keyed as directed by Consultant. Cabinet locks shall conform to keying schedule prepared by Hardware Consultant.

- .7 Slide bolt (inactive door of locked pair): 60 mm long barrel bolt, nickel plated: Hafele 252.70.722.
- .8 Door locks for 38 mm doors: supplied by Section 08 71 00 Door Hardware.
- .9 Pilaster and clips: KV 255, 256.
- .10 Coat hooks: GSH 307 x 115 mm brushed stainless steel.
- .11 Hardware finish: unless otherwise indicated chrome or nickel plated.
- .2 Standing and Running Trim
 - .1 Exterior:
 - .1 Grade: Custom
 - .2 Solid Stock: species.
- .3 Interior:
 - .1 Grade: Custom
 - .2 Solid Stock: species
 - .3 Veneered stock: veneer, grade, cut.
- .4 Exterior frames.
 - .1 Grade: Custom
 - .2 Frames to be solid wood species.
- .5 Interior Frames.
 - .1 Grade: Custom
 - .2 Frames to be solid wood.
- .6 Shelving.
 - .1 Softwood and poplar plywood DFP or CSP or PP custom grade, custom grade, (square) edge, 19 mm thick.
 - .2 Particleboard, grade Custom, 19 mm thick.
 - .3 Solid wood: poplar species, custom grade, 19 mm thick.
 - .4 Melamine: 19mm.

.5 Edge banding: provide 10 mm thick solid matching wood strip on (plywood) (particleboard) edges 12 mm or thicker, exposed in final assembly. Strips same width as (plywood) (particleboard).

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contract s are acceptable for wood products installation in accordance with NAWWS tolerances and requirements of Contract Documents.
 - .1 Visually inspect substrate in presence of Consultant.
 - .2 Inform Consultant 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 Consultant.

3.2 PREPARATION

.1 Back prime woodwork before installation, to NAWWS

3.3 INSTALLATION

- .1 Install items of finish carpentry in accordance with AWMAC NAAWS grade specified for respective items
- .2 In case of conflict between Contract Documents and NAAWS grade requirements, Contract Documents govern.
- .3 Install items of finish carpentry at locations shown on drawings.
 - .1 Position accurately, level, plumb straight.
 - .2 Fasten and anchor securely.
- .4 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.
- .5 Form joints to conceal shrinkage.

3.4 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 of baseboards to make snug, tight, joint. Cut right angle joints of casing and base with mitred joints.
- .2 Fit backs of baseboards and casing snugly to wall surfaces to eliminate cracks at junction of base and casing with walls.
- .3 Make joints in baseboard, where necessary using a [45] degrees scarf type joint.
- .4 Install door and window trim in single lengths without splicing.

.3 Interior and exterior frames:

.1 Set frames with plumb sides [and] level heads [and sills] and secure.

.4 Panelling:

- .1 Secure panelling and perimeter trim using adhesive recommended for purpose by manufacturer. Fill nail holes caused by temporary fixing with filler matching wood in colour.
- .2 Secure panelling and perimeter trim using concealed fasteners.
- .3 Secure panelling and perimeter trim using counter sunk screws plugged with matching wood plugs.

.5 Stairs:

- .1 Install stairs to location and details as indicated.
- .6 Handrails, wall rails and bumper rails.
 - .1 Install handrails, wall rails and bumper rails in locations indicated.
 - .2 Make joints hair line, dowelled and glued.

- .3 Install support brackets [as indicated].
- .4 Install brackets at ends and at 600 mm on centre minimum at intermediate spacings.
- .5 Secure using counter sunk screws plugged with matching wood plugs.

.7 Shelving:

.1 Install shelving on shelf brackets.

3.5 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 00 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 00 Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling.

3.6 TOUCHUP AND PROTECTION

- .1 Fill and retouch all nicks, chips and scratches in factory finishes and substrate materials to NAAWS standards. Replace damaged items that cannot be repaired to NAWWS standards
- .2 Protect installed products and components from damage during construction.
- .3 Repair damage to adjacent materials caused by finish carpentry installation.
- .4 Leave work to be site finished ready for finishing by Section 09 91 00 Painting.

END OF SECTION