Part 1 General

Expansion

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA B111-1974(R1998), Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164-M92(R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CSA O121-M1978(R1998), Douglas Fir Plywood.
 - .4 CAN/CSA-O141-05 Softwood Lumber.
 - .5 CSA O151-M1978(R1998), Canadian Softwood Plywood.
 - .6 CAN/CSA-O325.0-92(R1998), Construction Sheathing.
 - .7 CSA 080. 2-97(R2002) Pressure Treatment of Lumber, Timber, Bridge, Ties and Mine Ties.
- .2 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 2000.

1.2 QUALITY ASSURANCE

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood identification: by grade mark in accordance with applicable CSA standards.
- .3 Plywood, OSB and wood based composite panel construction sheathing identification: by grade mark in accordance with applicable CSA standards.

1.3 CO-ORDINATION

.1 Contractor to supply and install all blocking required for millwork, built in furniture, and equipment supplied and installed by others.

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 CAN/CSA-O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, curbs, sleepers, and fascia backing: pressure treated lumber.
 - .1 S2S is acceptable for all work.
 - .2 Board sizes: "Standard" or better grade.

- .3 Dimension sizes: "Standard" light framing or better grade.
- .4 Post and timbers sizes: "Standard" or better grade
- .3 Pressure treated lumber: to CSA CSA 080.2

2.2 PANEL MATERIALS

- .1 Douglas fir plywood (DFP): to CSA O121, standard construction.
- .2 Canadian softwood plywood (CSP) to CSA 0151, standard construction.
- .3 Plywood, OSB and wood based composite panels: to CAN/CSA-O325.

2.3 ACCESSORIES

- .1 Nails, spikes and staples: to CSA B111.
- .2 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
- .3 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws and lead or inorganic fibre plugs, explosive actuated fastening devices, recommended for purpose by manufacturer.

2.4 FINISHES

.1 Galvanizing: to CAN/CSA-G164, use galvanized fasteners for exterior work, pressure-preservative, fire-retardant treated lumber.

2.5 WOOD PRESERVATIVE

.1 Surface-applied wood preservative: Alkaline Copper Quaternary (ACQ).

Part 3 Execution

3.1 PREPARATION

- .1 Treat pressure treated wood cut surfaces with wood preservative, before installation as indicated and as follows:
 - .1 Pressure treated wood: treat all cut surfaces.

3.2 INSTALLATION

- .1 Comply with requirements of NBC, supplemented by the 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, equipment supplied and installed by others, wall and ceiling finishes, facings, fascia, soffit, siding and other work as required.
- .5 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .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 steel fasteners.

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.

3.4 SCHEDULES

- .1 Provide electrical equipment backboards for mounting electrical equipment as indicated. Use 19 mm thick plywood on 19 x 38 mm furring around spacing, perimeter and at maximum 300 mm intermediate.
- .2 Paint to Section 09 90 00
- .3 Pressure treated materials: Furring, blocking, nailing strips, grounds, rough bucks, curbs, sleepers, and fascia backing.

END OF SECTION

Part 1 General

1.1 REFERENCES

1 AWMAC Architectural Woodwork Quality Standards Illustrated 2003.

1.2 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 Submittal Procedures.
- .2 Indicate details of construction, profiles, jointing, fastening and other related details.
 - .1 Scales: profiles, details 1/2 full size.
- .3 Indicate materials, thicknesses, finishes and hardware.
- .4 Indicate locations of service outlets in casework, typical and special installation conditions, and connections, attachments, anchorage and location of exposed fastenings.

1.3 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00 Submittal Procedures.
- .2 Submit duplicate colour samples of laminated plastic for colour selection.
- .3 Submit duplicate samples of laminated plastic joints, edging, cutouts and profiles.

1.4 DELIVERY, STORAGE, AND HANDLING

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

Part 2 Products

2.1 MATERIALS

- .1 Softwood lumber: unless specified otherwise, S4S, moisture content 7 % or less in accordance with following standards:
 - 1 AWMAC custom grade, moisture content as specified.
- .2 Hardwood lumber: moisture content 7 % or less in accordance with following standards:
 - .1 AWMAC custom grade, moisture content as specified.

.3 Plywood: to AWMAC custom grade.

Expansion

- .4 Hardboard: AWMAC custom grade.
- .5 MDF (medium density fibreboard) core: to AWMAC custom grade, thickness as indicated, density 769 kg/m².
- .8 Laminated plastic for flatwork and vertical serfaces: to NEMA LD3, Grade VGL, Type S, 1.27 mm thick; based on solid colour range as selected by Contract Administrator from standard colour range.
 - .1 Acceptable material: Formica, Wilsonart, Arborite, Pionite, Nevamar.
- .9 Colours: allow for 5 colours as selected by Contract Administrator. Allow for textured surfaces and wood grains.
- .10 Laminated plastic backing sheet: Grade BK, Type S not less than 0.5 mm thick or same thickness and colour as face laminate.
- .11 Laminated plastic liner sheet: Grade GP, Type S, colour to be selected by Contract Administrator.
- .12 Thermofused Melamine: to NEMA LD3 Grade VGL.
 - .1 High wear resistant thermofused melamine: equal or exceed 400 cycles (Minimum standard for HPL abrasion test).
- .13 PVC edge banding: allow for 6 colours.
- .14 Nails and staples: to CSA B111.
- .15 Wood screws steel plated, type and size to suit application.
- .16 Splines: manufacturer's standard wood, plastic, or metal.
- .17 Sealant: in accordance with Section 07 92 10.
- .18 Laminated plastic adhesive: to CSA Standards and to laminate manufacturer recommendations.

2.2 MANUFACTURED UNITS

- .1 Casework.
 - .1 Fabricate caseworks to AWMAC custom quality grade.
 - .2 Furring, blocking, nailing strips, grounds and rough bucks and sleepers.
 - .1 Board sizes: "Standard" or better grade.
 - .2 Dimension sizes: "Standard" light framing or better grade.
 - .3 Case bodies (ends, divisions and bottoms)

- .1 MDF, 19 mm thickness.
- .2 Laminated plastic: as indicated, grade and type as specified.
- .3 Interior: melamine thickness and colour as indicated.

.4 Backs

Expansion

- .1 Melamine: thickness and colour as indicated.
- .5 Shelving for cabinets with doors.
 - .1 MDF laminated 19 mm thickness.
 - .1 Plastic laminate: interior, white, adjustable unless indicated otherwise.
 - .2 Edge banding: 0.5 mm PVC front edge.
- .6 Shelving exposed:
 - .1 MDF laminated 19 mm thickness.
 - .2 Laminated plastic: as indicated, grade and type as specified.
 - .3 Edge banding: 0.5 mm PVC front edge, laminated plastic all other exposed edges.

.7 Drawers

- .1 Fabricate drawers to AWMAC custom grade supplemented as follows:
- .2 Sides and Backs, bottoms:
 - .1 Melamine: 19 mm thick, interior, white.
 - .2 Edge banding: Melamine all exposed edges.
- .3 Fronts
- .1 MDF 19 mm thick.
- .2 Laminated plastic: grade and type as specified.
- .3 Edge banding: 0.5 mm PVC front edge, laminated plastic all other exposed edges.

.8 Doors:

- .1 Fabricate doors to AWMAC custom grade supplemented as follows:
 - .1 MDF 19 mm thickness.
 - .2 Laminated plastic: grade and type as specified.
 - .3 Laminated all exposed surfaces.
 - .4 Edge banding: 0.5 mm PVC front edge.

.9 Countertops and Backsplash

.1 Fabricate caseworks to AWMAC custom quality grade.

- .2 Laminated plastic: grade and type specified.
- .3 All exposed surfaces laminated, 3 mm PVC front edge.
- .4 Core 19 mm thick, MDF, fir plywood as indicated.
- .5 Adhesive: as recommended by laminate manufacturer.

2.6 FABRICATION

- .1 Set nails and countersink screws apply wood filler to indentations, sand smooth and leave ready to receive finish.
- .2 Shop install cabinet hardware for doors, shelves and drawers. Recess shelf standards unless noted otherwise.
- .3 Shelving to cabinetwork 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.
- 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 2400 mm. Keep joints 600 mm from sink cutouts.
- .9 Form shaped profiles and bends as indicated, using postforming 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.
- .11 Apply laminate backing sheet to reverse side of core of plastic laminate work.
- .12 Apply laminated plastic liner sheet to interior of cabinetry where indicated.

Part 3 Execution

3.1 INSTALLATION

.1 Do architectural woodwork to Quality Standards of the Architectural Woodwork Manufacturers Association of Canada (AWMAC), except where specified otherwise.

- .2 Install prefinished millwork at locations shown on drawings. Position accurately, level, plumb straight.
- .3 Fasten and anchor millwork securely. Provide 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 Apply water resistant building paper over wood framing members in contact with masonry or cementitious construction.
- .7 Fit hardware accurately and securely in accordance with manufacturer's written instructions.

3.2 INSTALLATION LAMINATES

- .1 Install work plumb, true and square, neatly scribed to adjoining surfaces.
- .2 Make allowances around perimeter where fixed objects pass through or project into laminated plastic work to permit normal movement without restriction.
- .3 Use draw bolts and splines in countertop joints. Maximum spacing 450 mm oc, 75 mm from edge. Make flush hairline joints.
- .4 Provide cutouts for inserts, grilles, appliances, outlet boxes and other penetrations. Round internal corners, chamfer edges and seal exposed core.
- .5 At junction of laminated plastic counter back splash and adjacent wall finish, apply small bead of sealant.

3.3 CLEANING

.1 Clean millwork and cabinet work inside cupboards and drawers, and outside surfaces.

3.4 PROTECTION

.1 Protect millwork and cabinet work from damage until final inspection.

END OF SECTION