

**Part 1            General**

**1.1                REFERENCES**

- .1    ASTM International
  - .1        ASTM A123/A123M-09, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- .2    CSA International
  - .1        CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
  - .2        CSA O121-08, (R2009), Douglas Fir Plywood.
  - .3        CSA O141-05 (R2014), Softwood Lumber.
  - .4        CSA O151-09 (R2014), Canadian Softwood Plywood.
  - .5        CSA O153-M1980 (R2003), Poplar Plywood.
  - .6        CSA O325-07, Construction Sheathing.
  - .7        CAN/CSA-Z809-08, Sustainable Forest Management.
- .3    Forest Stewardship Council (FSC)
  - .1        FSC-STD-01-001-2004, FSC Principle and Criteria for Forest Stewardship.
- .4    Health Canada/Workplace Hazardous Materials Information System (WHMIS)
  - .1        Material Safety Data Sheets (MSDS).
- .5    National Lumber Grades Authority (NLGA)
  - .1        Standard Grading Rules for Canadian Lumber 2010.
- .6    Sustainable Forestry Initiative (SFI)
  - .1        SFI-2010-2014 Standard.

**1.2                ACTION AND INFORMATIONAL SUBMITTALS**

- .1    Submit in accordance with Section 01 33 00 - Submittal Procedures.
  - .1        Wood Certification: submit vendor's Chain-of-Custody Certificate number for CAN/CSA-Z809 or FSC or SFI certified wood.

**1.3                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 grademark in accordance with applicable CSA standards.
- .4    Sustainable Standards Certification:
  - .1        Certified Wood: submit listing of wood products and materials used in accordance with CAN/CSA-Z809-08 (R2013) or FSC or SFI.

## **1.4 DELIVERY, STORAGE, AND HANDLING**

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

## **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.
  - .3 CAN/CSA-Z809 or FSC or SFI certified.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
  - .1 Board sizes: "standard" or better grade.
  - .2 Dimension sizes: "standard" light framing or better grade.
  - .3 Post and timbers sizes: "standard" or better grade.

### **2.2 PANEL MATERIALS**

- .1 Douglas fir plywood: to CSA O121, standard construction.
  - .1 Urea-formaldehyde free.
  - .2 CAN/CSA-Z809 or FSC or SFI certified.
- .2 Canadian softwood plywood (CSP): to CSA O151, standard construction.
  - .1 Urea-formaldehyde free.
  - .2 CAN/CSA-Z809 or FSC or SFI certified.
- .3 Poplar Plywood: to CSA O153, standard construction, urea-formaldehyde free.
  - .1 Urea-formaldehyde free.
  - .2 CAN/CSA-Z809 or FSC or SFI certified.
- .4 Plywood, OSB and wood based composite panels: to CSA O325.
  - .1 Urea-formaldehyde free.
  - .2 CAN/CSA-Z809 or FSC or SFI certified.

### **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 ASTM A123/A123M, use galvanized fasteners for exterior work, interior highly humid areas and pressure- preservative treated lumber.

## **2.5 WOOD PRESERVATIVE**

- .1 Surface-applied wood preservative: coloured, copper naphthenate or 5% pentachlorophenol solution, water repellent preservative.
- .2 Pentachlorophenol use is restricted to building components that are in ground contact and subject to decay or insect attack only. Where used, pentachlorophenol-treated wood must be covered with two coats of an appropriate sealer.
- .3 Structures built with wood treated with pentachlorophenol and inorganic arsenicals must not be used for storing food nor should the wood come in contact with drinking water.

## **Part 3 Execution**

### **3.1 PREPARATION**

- .1 Treat surfaces of material with wood preservative, before installation.
- .2 Apply preservative by dipping, or by brush to completely saturate and maintain wet film on surface for minimum 3 minute soak on lumber and one minute soak on plywood.
- .3 Re-treat surfaces exposed by cutting, trimming or boring with liberal brush application of preservative before installation.
- .4 Treat material as indicated:

### **3.2 INSTALLATION**

- .1 Comply with requirements of NBC, supplemented by the following paragraphs.
- .2 Install furring and blocking as required to space-out and support casework, cabinets, wall and ceiling finishes, facings, fascia, soffit, siding and other work as required.
- .3 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .4 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .5 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.
- .6 Install wood backing, dressed, tapered and recessed slightly below top surface of roof insulation for roof hopper.
- .7 Install sleepers as indicated.
- .8 Use caution when working with particle board. Use dust collectors and high quality respirator masks.

### **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.

**END OF SECTION**