

PART 1 - GENERAL

1.1 REFERENCES

- .1 Canada Green Building Council (CaGBC)
  - .1 LEED Canada-NC-2009, LEED (Leadership in Energy and Environmental Design): Green Building Rating System for New Construction and Major Renovations.
- .2 CSA International
  - .1 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
  - .2 CSA 0121-08, Douglas Fir Plywood.
  - .3 CSA 0141-05 (R2009), Softwood Lumber.
  - .4 CSA 0151-0, Canadian Softwood Plywood.
  - .5 CAN/CSA-0325.0-07, Construction Sheathing.
- .3 Forest Stewardship Council (FSC)
  - .1 FSC-STD-01-001-2004, FSC Principle and Criteria for Forest Stewardship.
- .4 Green Seal Environmental Standards (GS)
  - .1 GS-11-11, Paints and Coatings.
- .5 National Lumber Grades Authority (NLGA)
  - .1 Standard Grading Rules for Canadian Lumber 2010.
- .6 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards
  - .1 SCAQMD Rule 1113-A2011, Architectural Coatings.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's instructions, printed product literature and data sheets for rough carpentry work and include product characteristics, performance criteria, physical size, finish and limitations.

1.2 ACTION AND  
INFORMATIONAL  
SUBMITTALS  
(Cont'd)

- .3 Sustainable Design Submittals:  
.1 LEED Canada submittals: in accordance  
with Section 01 35 21 - LEED Requirements.

1.3 MAINTENANCE  
MATERIALS  
SUBMITTALS

- .1 Extra Stock Materials:  
.1 Provide electrical equipment backboards  
for mounting electrical equipment as  
indicated. Use 19 mm thick plywood on 19 x 38  
mm furring perimeter and at maximum 300 mm  
intermediate

1.4 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 Sustainable Standards Certification:  
.1 Certified Wood: submit listing of wood  
products and materials used in accordance with  
FSC.

1.5 DELIVERY,  
STORAGE AND  
HANDLING

- .1 Deliver, store and handle materials in  
accordance with Section 01 61 00 - Common  
Product Requirements and with manufacturer's  
written instructions.  
.2 Develop Construction Waste Management Plan  
related to Work of this Section and in  
accordance with Section 01 35 21 - LEED  
Requirements.  
.3 Packaging Waste Management: remove for reuse  
or return of pallets, crates, padding,  
banding, and packaging materials as specified  
in Construction Waste Management Plan in  
accordance with Section 01 74 21 -  
Construction/Demolition Waste Management and  
Disposal and Section 01 35 21 - LEED  
Requirements.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% or less in accordance with following standards:
  - .1 CAN/CSA-0141.
  - .2 NLGA Standard Grading Rules for Canadian Lumber.
  - .3 FSC certified.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
  - .1 S2S is acceptable for all use.
  - .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 Panel Materials:
  - .1 Canadian softwood plywood (CSP): to CSA 0151, standard construction.
    - .1 Urea-formaldehyde free.
- .4 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.
- .5 Primers, Paints, Coatings: in accordance with manufacturer's recommendations for surface conditions.

- 2.2 ACCESSORIES
- .1 Fasteners: to CAN/CSA-G164, for exterior work and interior highly humid areas pressure-preservative lumber.
  - .2 Nails, spikes and staples: to CSA B111.
  - .3 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
  - .4 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.
  - .5 Fasteners for strapping to sheathing to structural steel studs; #10 x 100 mm long self-drilling/tapping screws with Robertson screw heads.
  - .6 Fasteners for prefinished wood siding: to Specification Section No. 07 46 23.
  - .7 Construction adhesive:
    - .1 Heavy duty, high grab, interior/exterior adhesive.
    - .2 Premium grade solvent - based material, to acceptance of Departmental Representative.

PART 3 - EXECUTION

- 3.1 EXAMINATION
- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for rough carpentry installation in accordance with manufacturer's written instructions.
    - .1 Visually inspect substrate.
    - .2 Inform Departmental Representative 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 Departmental Representative.

3.2 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 1 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 follows:
  - .1 Wood cants, fascia backing, curbs, nailers, sleepers on roof deck.
  - .2 All wood furring on outside surface of exterior walls.
  - .3 Wood sleepers supporting wood subflooring over concrete slabs in contact with ground or fill.

3.3 INSTALLATION

- .1 Comply with requirements of NBC, supplemented by the following paragraphs.
- .2 Install vertical wood strapping through plywood sheathing into structural steel studs using stainless steel screws @ 400 mm o.c. vertically.
- .3 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.
- .4 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .5 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .6 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.

3.3 INSTALLATION  
(Cont'd)

- .7 Install wood backing, dressed, tapered and recessed slightly below top surface of roof insulation for roof hopper.
- .8 Install sleepers as indicated.
- .9 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .10 Countersink bolts where necessary to provide clearance for other work.
- .11 For multi-layer plywood application:
  - .1 Secure layers to each other using construction adhesive applied in a serpentine manner using 8 mm diameter beads of adhesive at 300 mm o.c.
  - .2 Fasten assembled plywood to structural steel studs as per Section 05 41 00 - Structural Metal Stud Framing.

3.4 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.