

PART 1 – GENERAL

1.1 References

- .1 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-11.3, Hardboard.
- .2 Canadian Standards Association (CSA)
 - .1 CSA B111 - Wire Nails, Spikes and Staples.
 - .2 CSA O80 - Wood Preservation.
 - .3 CAN/CSA O141 - Softwood Lumber.
 - .4 CSA O151 - Canadian Softwood Plywood.
- .3 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber.

1.2 Quality Assurance

- .1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Plywood, particleboard, OSB and wood based composite panels in accordance with CSA and ANSI standards.

PART 2 - PRODUCTS

2.1 Materials

- .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% (S-dry) or less in accordance with CAN/CSA-O141, Spruce, Pine or Fir NLGA No. 2 or better grade. Glued end-jointed (finger-jointed) lumber is not acceptable
- .2 Canadian softwood plywood (CSP): to CSA 0151, standard construction, square edge. Exterior sheathing grade.
- .3 Hardboard paneling: to CAN/CGSB-11.3, smooth, tempered, 1219 x 2438 x 3 mm thick panels.
- .4 Nails, spikes and staples: to CSA B111 and NBC requirements. Galvanized.
- .5 Bolts: steel, of sizes required, complete with nuts and washers. Galvanized.
- .6 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws and lead plugs, recommended for purpose by manufacturer.
- .7 Surface-applied wood preservative: copper naphthenate or pentachlorophenol base water repellent preservative. Use clear for materials exposed in final assembly, coloured elsewhere.

2.2 Pressure Preservative Treated Wood

- .1 Provide lumber materials pressure preservative treated for:
 - .1 Rough bucks at openings.
 - .2 Wood strapping.
 - .3 Lumber used on exterior of building, above or below grade.
- .2 Treat material to CAN/CSA-O80 using Type-C (copper chromate arsenate) preservative to obtain a minimum net retention level of 6.4 kg/m³ of wood.
- .3 Materials shall be dried after treatment to a moisture content of 19% or less.
- .4 Each piece of treated material shall be identified with a tag or ink mark bearing the Canadian Wood Preservers' Bureau quality mark.
- .5 Apply surface applied wood preservative to heartwood exposed from ripping, end cutting or boring.

PART 3 - EXECUTION

3.1 Installation

- .1 Comply with requirements of NBC, Part 9 supplemented by following paragraphs.
- .2 Install members true to line, levels and elevations. Space uniformly.
- .3 Construct continuous members from pieces of longest practical length.
- .4 Install spanning members with "crown-edge" up.
- .5 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .6 Countersink bolts where necessary to provide clearance for other Work.
- .7 Use fastenings of following types, except where specific type is indicated or specified:
 - .1 To hollow masonry, plaster and panel surfaces use toggle bolt.
 - .2 To solid masonry and concrete use expansion shield with lag screw, lead plug with wood screw.
 - .3 To structural steel use bolts through drilled hole, or welded stud-bolts or power driven self-drilling screws, or welded stud-bolts or explosive actuated stud-bolts.
- .8 Install furring and blocking as required to space-out and support surface wall and ceiling finishes, facings, fascia, soffit, siding and other Work as indicated. Align and plumb faces of furring and blocking to tolerance of 1:600.
- .9 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other Work. Except where indicated otherwise, use material at least 38 mm thick.
- .10 Install fascia backing, nailers and other wood supports as required and secure using galvanized fasteners.
- .11 Install hardboard paneling with finishing nails.

PART 4 - MEASUREMENT AND PAYMENT

4.1 Method of Measurement and Payment

- .1 Rough Carpentry
 - .1 Rough Carpentry will be paid for at the Contract Lump Sum Price for "Wood, Plastics and Composites", which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this specification.

~End~

PART 1 - GENERAL

1.1 References

- .1 Canadian Standards Association (CSA)
 - .1 CAN/CSA-O80 Series-97, Wood Preservation.
 - .2 CAN/CSA-O86.1-94, Engineering Design in Wood (Limit States Design).
 - .3 CAN/CSA-O141-91(R1999), Softwood Lumber.
- .2 National Lumber Grades Authority (NLGA)
 - .1 NLGA-2000, Standard Grading Rules for Canadian Lumber.

1.2 Design Criteria

- .1 Design trusses, bracing, bridging and uplift anchorage in accordance with CAN/CSA-O86.1 for building locality as ascertained by NBC, Climatic Information for Building Design in Canada and minimum uniform and minimum concentrated loadings stipulated in NBC commentary.
- .2 Limit live load deflection to 1/240th of span.

1.3 Quality Control

- .1 Identify lumber by grade stamp of an agency certified by Canadian Lumber Standards Administration Board.

1.4 Shop Drawings

- .1 Submit shop drawings, bearing the stamp of a registered professional engineer in the Province of Manitoba, for approval in accordance with Submittal Procedures.
- .2 Indicate species, sizes, and stress grades of lumber used as truss members. Show pitch, span, camber, configuration and spacing of trusses. Indicate connector types, thicknesses, sizes, locations and design value. Show bearing details. Indicate design load for members.
- .3 Show lifting points for storage, handling and erection.
- .4 Show location of lateral bracing for compression members.

1.5 Delivery and Storage

- .1 Store trusses on job site in accordance with manufacturer's instructions. Provide bearing supports and bracings. Prevent bending, warping and overturning of trusses.

PART 2 - PRODUCTS

2.1 Materials

- .1 Lumber: spruce species, fire retardant treated grade, S4S, with maximum moisture content of 19% at time of fabrication and to following standards:
 - .1 CAN/CSA-O141.

- .2 NLGA (National Lumber Grading Association), Standard Grading Rules for Canadian Lumber.
- .2 Fastenings: to CAN/CSA-O86.1.

2.2 Fabrication

- .1 Fabricate wood trusses in accordance with reviewed shop drawings.
- .2 Provide for design camber and roof slopes when positioning truss members.
- .3 Connect members using bolts and nuts, metal gussets.
- .4 Apply fire retardant in accordance with CAN/CSA-O80 Series.

PART 3 - EXECUTION

3.1 Erection

- .1 Erect wood trusses [in accordance with approved erection drawings.
- .2 Indicated lifting points to be used to hoist trusses into position.
- .3 Make adequate provisions for handling and erection stresses.
- .4 Exercise care to prevent out-of-plane bending of trusses.
- .5 Install temporary horizontal and cross bracing to hold trusses plumb and in safe condition until permanent bracing and decking are installed.
- .6 Install permanent bracing in accordance with approved shop drawings, prior to application of loads to trusses.
- .7 Do not cut or remove any truss material without approval of Contract Administrator.

PART 3 – MEASUREMENT AND PAYMENT

4.1 Method of Measurement and Payment

- .1 Prefabricated Wood Trusses
 - .1 Prefabricated Wood Trusses will be paid for at the Contract Lump Sum Price for “Wood, Plastics and Composites;”, which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this specification

~End~