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**Part 1            General**

**1.1            RELATED SECTIONS**

- .1        Section 06 17 53 – Shop-Fabricated Wood Trusses.

**1.2            REFERENCES**

- .1        Canadian Standards Association (CSA International)
  - .1        CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
  - .2        CAN/CSA-G164-M92(R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.
  - .3        CSA O141-05, Softwood Lumber.
  - .4        CSA O151-04, Canadian Softwood Plywood.
  - .5        CAN/CSA-O325.0-92(R2003), Construction Sheathing.
- .2        National Lumber Grades Authority (NLGA)
  - .1        Standard Grading Rules for Canadian Lumber 2005.

**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.

**1.4            DESIGN REQUIREMENTS**

- .1        Design Criteria:
  - .1        Structural materials method and design in conformance with the latest edition of all applicable standards and codes.
  - .2        Structural design in conformance with the provincial building code latest edition, and the National Building Code of Canada 2005, latest edition.
  - .3        All discrepancies in details and dimensions shall be brought to the attention of the engineer prior to commencing related work. Drawings are not to be scaled.
  - .4        Importance category of building: Normal
  - .5         $\Delta_{max}$ :            H/400 for lateral deflections.  
                              L/360 for vertical roof deflections.  
                              L/360 for vertical Live Load deflections.

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**Part 2            Products**

**2.1               LUMBER MATERIAL**

- .1      Lumber: unless specified otherwise, softwood, S4S, moisture content 19% or less. All exterior wood shall be pressure treated. Lumber shall be 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, cants, curbs, fascia backing and sleepers:
  - .1          S2S is acceptable for S45.
  - .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      Wood open web joist to be specified by joist supplier:
  - .1          Depth of joist in accordance with drawings.
  - .2          Loading in accordance with drawings.

**2.2               PANEL MATERIALS**

- .1      Canadian softwood plywood (CSP): to CSA O151, standard construction.
  - .1          Urea-formaldehyde free.
- .2      Plywood, OSB and wood based composite panels: to CAN/CSA-O325.
  - .1          Urea-formaldehyde free.

**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 and interior highly humid areas (including decorative trusses).

**Part 3            Execution**

**3.1                INSTALLATION**

- .1      Comply with requirements of the current 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 spanning members with "crown-edge" up.
- .5      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.
- .6      Align and plumb faces of furring and blocking to tolerance of 1:600.
- .7      Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .8      Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.
- .9      Install wood backing, dressed, tapered and recessed slightly below top surface of roof insulation for roof hopper.

**3.2                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**