

## **PART 1**      **GENERAL**

### **1.1**      **RELATED REQUIREMENTS**

- .1      Section 01 74 21 – Construction/Demolition Waste Management and Disposal.
- .2      Section 06 05 73 – Wood Treatment.
- .3      Section 06 17 53 – Shop-Fabricated Wood Trusses.
- .4      Section 07 31 13 – Asphalt Shingles.
- .5      Section 09 21 16 – Gypsum Board Assemblies.

### **1.2**      **REFERENCES**

- .1      ASTM International
  - .1      ASTM A123/A123M-13, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
  - .2      ASTM A653/A653M-11, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot-Dip Process.
  - .3      ASTM D1761-12, Standard Test Methods for Mechanical Fasteners in Wood.
- .2      CSA International
  - .1      CAN/CSA-A123.2-03(R2008), Asphalt Coated Roofing Sheets.
  - .2      CSA B111-1974(R2003), Wire Nails, Spikes and Staples.
  - .3      CSA O112 Series-M1977(R2006), CSA Standards for Wood Adhesives.
  - .4      CSA O121-08, Douglas Fir Plywood.
  - .5      CSA O141-05(R2009), Softwood Lumber.
- .3      National Lumber Grades Authority (NLGA)
  - .1      Standard Grading Rules for Canadian Lumber 2007.
- .4      The Truss Plate Institute of Canada
  - .1      Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses 2007.

### **1.3**      **QUALITY ASSURANCE**

- .1      Lumber 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.
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## **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
  - .1 Store materials off ground in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Store and protect wood from nicks, scratches, and blemishes.
  - .3 Replace defective or damaged materials with new.
- .4 Packaging Waste Management: remove for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

## **PART 2 PRODUCTS**

### **2.1 FRAMING STRUCTURAL AND PANEL MATERIALS**

- .1 Lumber: softwood, S4S, moisture content 19% (S-dry) or less in accordance with following standards:
  - .1 CSA O141.
  - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, fascia backing and sleepers:
  - .1 S2S is acceptable for all purposes.
  - .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 Plywood, OSB and wood based composite panels: to CSA O325.
- .4 Douglas fir plywood (DFP): to CSA O121, standard construction.

### **2.2 ACCESSORIES**

- .1 Air seal: closed cell polyurethane or polyethylene.
  - .2 Sealants: in accordance with Section 07 92 00 - Joint Sealants.
  - .3 General purpose adhesive: to CSA O112 Series.
  - .4 Nails, spikes and staples: to CSA B111.
  - .5 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
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- .6 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws and lead or inorganic fibre plugs, recommended for purpose by manufacturer.
- .7 Fastener Finishes:
  - .1 Galvanizing: to ASTM A123/A123M, use galvanized fasteners for exterior work and pressure-preservative treated lumber.
  - .2 Stainless steel: use stainless steel 316 alloy for exterior work.
- .8 Wood Preservative:
  - .1 Preservative: in accordance with manufacturer's recommendations for surface conditions:

### **PART 3**      **EXECUTION**

#### **3.1**      **EXAMINATION**

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for product installation in accordance with manufacturer's written instructions.
  - .1 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
  - .2 Proceed with installation only after unacceptable conditions have been remedied.

#### **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 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.

#### **3.3**      **MATERIAL USAGE**

- .1 Roof sheathing:
  - .1 Plywood, DFP or CSP sheathing grade, T&G edge, 16 mm thick.
- .2 Electrical equipment mounting boards:
  - .1 Plywood, DFP or CSP select grade, square edge 16 mm thick.

#### **3.4**      **INSTALLATION**

- .1 Install members true to line, levels and elevations, square and plumb.
  - .2 Construct continuous members from pieces of longest practical length.
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- .3 Select exposed framing for appearance. Install lumber and panel materials so that grade-marks and other defacing marks are concealed or are removed by sanding where materials are left exposed.
- .4 Install roof sheathing in accordance with requirements of NBC.
- .5 Install furring and blocking as required to space-out and support wall and ceiling finishes, fascia, soffit, and other work as required.
- .6 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .7 Install fascia backing, nailers and other wood supports as required and secure using galvanized steel fasteners.
- .8 Use dust collectors and high quality respirator masks when cutting or sanding wood panels.
- .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.

### **3.5 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.

### **3.6 PROTECTION**

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by rough carpentry installation.