

Part 1 General

1.1 RELATED SECTIONS

- .1 Division 1
- .2 Section 06 20 00 - Finish Carpentry
- .3 Section 06 40 00 - Architectural Woodwork
- .4 Section 07 92 10 - Joint Sealants
- .5 Section 09 21 16 - Gypsum Board Assemblies
- .6 Section 09 91 23 - Interior Painting

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM A653/A653M-07, Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .2 ASTM C578-07, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
 - .3 ASTM C1289-07, Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
 - .4 ASTM C1396/C1396M, Standard Specification for Gypsum Wallboard.
 - .5 ASTM D1761-06, Standard Test Methods for Mechanical Fasteners in Wood.
 - .6 ASTM D5456-07, Standard Specification for Evaluation of Structural Composite Lumber Products.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-11.3-M87, Hardboard.
 - .2 CAN/CGSB-51.32-M77, Sheathing, Membrane, Breather Type.
 - .3 CAN/CGSB-51.34-M86, Vapour Barrier, Polyethylene Sheet for Use in Building Construction.
 - .4 CAN/CGSB-71.26-M88, Adhesive for Field-Gluing Plywood to Lumber Framing for Floor Systems.
- .3 Canadian Standards Association (CSA)
 - .1 CSA B111-74 (R2003), Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164-M92 (R2003), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CSA O112 Series-M1977 (R2006), Standards for Wood Adhesives.
 - .4 CSA O121-M1978 (R2003), Douglas Fir Plywood.
 - .5 CAN/CSA-O141-05, Softwood Lumber.
 - .6 CSA O151-04, Canadian Softwood Plywood.
 - .7 CSA O153-M1980 (R2003), Poplar Plywood.
 - .8 CAN/CSA-O325-07, Construction Sheathing.
- .4 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 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.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Contract Conditions to the maximum extent economically possible.
- .2 Separate wood waste in accordance with applicable provincial and municipal regulations.
- .3 Set aside damaged wood and dimensional lumber off-cuts for approved alternative uses (e.g. bracing, blocking, cripples, bridging). Store this separated reusable wood waste convenient to cutting station and area of work.
- .4 Separate metal, plastic, wood and corrugated cardboard-packaging in accordance with applicable provincial and municipal regulations and place in designated areas for recycling.
- .5 Do not burn scrap at the project site.
- .6 Fold up metal banding, flatten, and place in designated area for recycling.

Part 2 Products

2.1 FRAMING AND STRUCTURAL MATERIALS

- .1 Lumber: unless specified otherwise, softwood, S4S, moisture content 19% (S-dry) or less 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 and sleepers:
 - .1 S2S is acceptable for all work.
 - .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.

2.2 PANEL MATERIALS

- .1 Plywood and wood based composite panels: to CAN/CSA-O325.
- .2 Douglas fir plywood (DFP): to CSA O121, standard construction.
- .3 Canadian softwood plywood (CSP): to CSA O151, standard construction.

2.3 FIRE-RETARDANT TREATED MATERIALS

- .1 General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- .2 Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.
 - .1 Use treatment that does not promote corrosion of metal fasteners.
 - .2 Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated lumber and plywood by pressure process after being subjected to accelerated weathering according to ASTM D 2898. Use for exterior locations and where indicated.
 - .3 Interior Type A: AWWA U1, Use Category UCFA, Commodity Specification H, low temperature (low hygroscopic) type, chemically treated and pressure impregnated. Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.
- .3 Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.
- .4 Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.
- .5 Application: Treat all miscellaneous carpentry unless otherwise indicated.
 - .1 Framing for raised platforms.
 - .2 Concealed blocking.
 - .3 Roof framing and blocking.
 - .4 Wood cants, nailers, curbs, equipment support bases, blocking, and similar members in connection with roofing.
 - .5 Plywood backing panels.

2.4 CONSTRUCTION PANELS

- .1 Communications and Electrical Room Mounting Boards: PS 1 A-D plywood, or medium density fiberboard; ¾ inch (19 mm) thick; flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E 84.

2.5 ACCESSORIES

- .1 Sealants: to Section 07 92 10 Joint Sealants.
- .2 General purpose adhesive: to CSA O112 Series.
- .3 Nails, spikes and staples: to CSA B111.
- .4 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
- .5 Proprietary fasteners: toggle bolts, expansion shields and lag bolts, screws and lead or inorganic fibre plugs, recommended for purpose by manufacturer.

- .6 Nailing discs: flat caps, minimum 25 mm diameter, minimum 0.4 mm thick, formed to prevent dishing. Bell or cup shapes not acceptable.

2.6 FASTENER FINISHES

- .1 Galvanizing: to CAN/CSA-G164, use galvanized fasteners for exterior work, interior highly humid areas and fire-retardant treated lumber.

Part 3 Execution

3.1 PREPARATION

- .1 Store wood products in a clean and dry environment.

3.2 INSTALLATION

- .1 Comply with requirements of NBC 2005 Part 9 supplemented by 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, electrical equipment mounting boards, and other work as required.
- .6 Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels. Install fire-retardant treated plywood backing panels with classification marking of testing agency exposed to view.
- .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 fasteners.
- .9 Install sleepers as indicated.
- .10 Use dust collectors and high quality respirator masks when cutting or sanding wood panels.

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.
- .3 Use nailing disks for soft sheathing as recommended by sheathing manufacturer.

END OF SECTION
