

ROUGH CARPENTRY

1. GENERAL

1.1 Design Requirements

- .1 Design construction methods for expansion and contraction of materials. Adopt method of construction to ensure that materials are rigidly and securely attached and will not be loosened by work of other Sections. Fasten wood nailers, blocking, framing and strapping solidly to adjacent materials in true planes.

1.2 Quality Assurance

- .1 Lumber Identification: Lumber identification shall conform to requirements of Standard Grading Rules for Canadian Lumber of National Lumber Grades Authority (NLGA) or grade stamped by an agency certified by Canadian Lumber Standards Accreditation Board.
- .2 Source Limitation: Lumber for each type of structural component shall be of same species and grade, equally seasoned and shall be processed and stamped at same mill. Grading: 120, National Grading Rule for Dimension Lumber, kiln dried to maximum 19% moisture, and in clean condition.
- .3 Plywood identification: by grade mark in accordance with applicable CSA standards.
- .4 Align and plumb faces of furring and blocking to tolerance of 1:600.

1.3 Submittals

- .1 Preservative Treatment Test Reports: Duplicate reports from chemical treatment manufacturer and certification by independent testing agency comply with requirements. Indicate type of preservative used, net amount of preservative retained, and chemical treatment Manufacturer's written instructions for handling, storing, installing, and finishing treated material.
- .2 For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project Site.
- .3 Include copies of warranties from chemical treatment manufacturers for each type of treatment.

1.4 Waste Disposal

- .1 Dispose waste legally Off-Site, in accordance with governing regulation. Dispose of any end-cuts and left over chemicals in an approved land-fill site. Do not burn or allow other use of end-cuts.

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2. PRODUCTS

2.1 Materials

- .1 Framing Lumber: Unless specified otherwise, Spruce/Pine/Fir (SPF), NLGA 121b Standard, with structural members meeting minimum No. 2 Grade requirements of CAN/CSA-O141.
- .2 Cants, Curbs, Blocking, Nailers and other Members Less Than 89 mm (4") Wide: Spruce, 122c. "Standard" light framing, except as otherwise specified.
- .3 Softwood Plywood, Douglas Fir, CSA O121-M of Following Grades: Good One Side (G1S) elsewhere.
- .4 Rough Hardware: Canadian Standards Association (CSA) B111; Nails, screws, bolts, lag screws, anchors, special fastening devices and supports required for erection of carpentry components. Use galvanized components if exposed to exterior atmosphere. Galvanize in accordance with requirements of CAN/CSA-G164-M.
- .5 General purpose adhesive: CSA O112 Series.
- .6 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.

2.2 Wood Preservative-Treated Materials

- .1 Preservative Treatment by Pressure Process: CSA O80 Series, using preservative chemicals acceptable to authorities having jurisdiction, ammoniacal or amine copper quat (ACQ), or copper azole (AC), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated with inorganic boron (SBX).
- .2 Precut wood, where practical, prior to preservative treatment.
- .3 Treat site cut pressure treated lumber cut ends treated with preservatives compatible with pressure treatment chemicals.
- .4 Kiln-dry material after treatment to a maximum moisture content of 19% for lumber and 15% for plywood. Do not use material that is warped or does not comply with requirements for untreated material.
- .5 Mark each treated item with the treatment quality mark of an inspection agency approved by the Canadian Lumber Standards Accreditation Board.
- .6 Application: Treat items indicated on Drawings, and the following:
 - .1 Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, air and vapor barriers, and waterproofing.

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- .2 Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.

2.3 Fire-Retardant-Treated Materials

- .1 General: Identify fire-retardant-treated wood with appropriate classification marking of ULC or another testing and inspecting agency acceptable to authorities having jurisdiction.
- .2 Fire retardant treated wood: To Underwriter Laboratories of Canada (ULC) S102, flame spread, fuel contributed and smoke developed ratings of 25 or less, pressure treated.
 - .1 Lumber and plywood: FirePro FRTW by Osmose, or Dricon FRT by Arch Wood Products Inc., or other acceptable equivalents.
 - .2 Particleboard: Duraflake FR by Weyerhaeuser, or other acceptable equivalents.
- .3 Use treatment that does not promote corrosion of metal fasteners.

3. EXECUTION

3.1 Installation - General

- .1 Install members true to line, levels and elevations.
- .2 Construct continuous members from pieces of longest practical length.
- .3 Install spanning members with crown-edge up.
- .4 Install materials so that grade-marks and other defacing marks are not visible or are removed by sanding.
- .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 Fasten work to hollow units with toggle bolts and to solid masonry or concrete with lead expansion shields and lag screws. Do not use organic fibre or wood plugs.

3.2 Furring And Blocking

- .1 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.
- .2 Install furring to support siding applied vertically and where sheathing is not suitable for direct nailing.

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3.3 Nailing Strips, Grounds And Rough Bucks

- .1 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other Work.

3.4 Cants, Curbs, Fascia Backing

- .1 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized fasteners.

3.5 Electrical, Data and Telephone Equipment Backboard

- .1 Provide fire retardant treated backboards for mounting equipment as indicated. Use 19 mm ($\frac{3}{4}$ ") thick plywood on 38 mm x 89 mm (2 x 4) furring around perimeter and at maximum 300 mm (12") intermediate spacing.

END OF SECTION