

SECTION 06100 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

1.2 SUMMARY:

- A. Types of work in this section include rough carpentry for:
- B. Wood ground, nailers, and blocking.

1.3 DEFINITIONS:

- A. Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed, except as otherwise indicated.

1.4 SUBMITTALS:

- A. Material Certificates: Where dimensional lumber is provided to comply with minimum allowable unit stresses, submit listing of species and grade selected for each use, and submit evidence of compliance with specified requirements. Compliance may be in form of a signed copy of applicable portion of lumber producer's grading rules showing design values for selected species and grade. Design values shall be as approved by the Board of Review of American Lumber Standards Committee.

1.5 PRODUCT HANDLING:

- A. Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar materials.

1.6 PROJECT CONDITIONS:

- A. Coordination: Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow attachment of other work.

PART 2 - PRODUCTS

2.1 LUMBER, GENERAL:

- A. Lumber Standards: Manufacture lumber to comply with PS 20 "American Softwood Lumber

Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.

- B. Inspection Agencies: Inspection agencies and the abbreviations used to reference with lumber grades and species include the following:
 - 1. SPIB - Southern Pine Inspection Bureau.
 - 2. WCLIB - West Coast Lumber Inspection Bureau.
 - 3. WWPA - Western Wood Products Association.
- C. Grade Stamps: Factory-mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
 - 1. For exposed lumber apply grade stamps to ends or back of each piece, or omit grade stamps entirely and issue certificate of grade compliance form inspection agency in lieu of grade stamp.
- D. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS 20, for moisture content specified for each use.
 - 1. Provide dressed lumber, S4S, unless otherwise indicated.
 - 2. Provide seasoned lumber with 19 percent maximum moisture content at time of dressing and shipment for sizes 2" or less in nominal thickness, unless otherwise indicated.

2.2 DIMENSION LUMBER:

- A. For structural light framing (2" to 4" thick, 2" to 4" wide), provide the following grade and species:
 - 1. Southern Pine graded under SPIB rules.
 - 2. No. 2 grade.
- B. For structural framing (2" to 4" thick, 5" and wider), provide the following grade and species:
 - 1. No. 2 grade.
 - 2. Southern Pine graded under SPIB rules.

2.3 MISCELLANEOUS LUMBER:

- A. Provide wood for support or attachment of other work including rooftop equipment curbs and support bases, cant strips, bucks, nailers, blocking, furring, grounds, stripping and similar members. Provide lumber of sizes indicated, worked into shapes shown, and as follows:
- B. Moisture content: 19 percent maximum for lumber items not specified to receive wood preservative treatment.
- C. Grade: No. 2 grade boards per SPIB rules.

2.4 CONSTRUCTION PANELS:

- A. Construction Panel Standards: Comply with PS 1 "U.S Product Standard for Construction and Industrial Plywood" for plywood panels and, for products not manufactured under PS 1 provisions, with American Plywood Association (APA) "Performance Standard and Policies for Structural-Use Panels", Form No. E445.
- B. Trademark: Factory-mark each construction panel with APA trademark evidencing compliance with grade requirements.
- C. Concealed APA Performance-Rated Panels: Where construction panels will be used for the following concealed types of applications, provide APA Performance-Rated Panels complying with requirements indicated for grade designations, span rating, exposure durability classification, edge detail (where applicable) and thickness.
- D. Plywood Backing Panels: For mounting electrical or telephone equipment, provide fire-retardant treated plywood panels with grade designation, APA C-D PLUGGED INT with exterior glue, in thickness indicated, or, if not otherwise indicated, not less than 15/32".

2.5 MISCELLANEOUS MATERIALS:

- A. Fasteners and Anchorages: Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including recommended nails.
 - 1. Where rough carpentry work is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners and anchorages with a hot-dip zinc coating (ASTM A 153).

2.6 WOOD TREATMENT BY PRESSURE PROCESS:

- A. Preservative Treatment: Where lumber or plywood is indicated as "Trt-Wd" or "Treated", or is specified herein to be treated, comply with applicable requirements of AWPB Standards C2 (Lumber) and C9 (Plywood) and of AWPB Standards listed below. Mark each treated item with the AWPB Quality Mark Requirements.
 - 1. Pressure-treat above-ground items with water-borne preservatives to comply with AWPB LP-2. After treatment, kiln-dry lumber and plywood to a maximum moisture content, respectively, of 19 percent and 15 percent. Treat indicated items and the following:
 - a. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers and waterproofing.
 - 2. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of same chemical used for treatment and to comply with AWPB M4. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL:

- A. Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.
- B. Set carpentry work to required levels and lines, with members plumb and true and cut and fitted.
- C. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards.
- D. Countersink nail heads on exposed carpentry work and fill holes.
- E. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; predrill as required.

3.2 WOOD GROUNDS, NAILERS, BLOCKING AND SLEEPERS:

- A. Provide wherever shown and where required for screeding or attachment of other work.

Form to shapes as shown and cut as required for true line and level of work to be attached. Coordinate location with other work involved.
- B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise indicated. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.

3.3 WOOD FRAMING, GENERAL:

- A. Provide framing members of sizes and on spacings shown, and frame openings as shown, or if not shown, comply with recommendations of "Manual for House Framing" of National Forest Products Association (N.F.P.A). Do not splice structural members between supports.
- B. Anchor and nail as shown, and to comply with "Recommended Nailing Schedule" of "Manual for House Framing" and "National Design Specifications for Wood Construction" published by N.F.P.A.

3.4 INSTALLATION OF CONSTRUCTION PANELS:

- A. General: Comply with applicable recommendations contained in Form No. E 30F, "APA Design/Construction Guide - Residential & Commercial", for types of construction panels and applications indicated.
- B. Fastening Methods: Fasten panels as indicated below:
 - 1. Plywood Bacing Panels: Nail to supports.

END OF SECTION 06100