

SECTION 06100
ROUGH CARPENTRY

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Scope:

1. Types of work in this Section include, but are not limited to, rough carpentry for:

- a. Wood grounds, nailers, plates, and blocking.
- b. Plywood sheathing and backing.

B. Treatment of rough carpentry materials included under this Work is specified under Section 06300 - WOOD TREATMENT.

1.02 RELATED WORK

- A. UNIT MASONRY: Section 04220.
- B. FINISH CARPENTRY AND MILLWORK: Section 06200.
- C. TPO ROOFING SYSTEM: Section 07540.
- D. FLASHING AND SHEET METAL: Section 07600.

1.03 QUALITY ASSURANCE

A. Approved Products: As applicable, products used herein shall comply with requirements of the Florida Product Approval System as required by Florida Statute 553.842 and Florida Administrative Code 9B-72. Refer to Drawings for details including fastenings governing approved products.

B. Reference Standards:

- 1. American Forest & Paper Association (AFPA):
 - a. Manual for Wood Frame Construction.
- 2. American Lumber Standards Committee (ALSC):
 - a. Board of Review.

3. American Plywood Association (APA):
 - a. APA Standard Grading Rules.
4. American Society for Testing and Materials (ASTM):
 - a. Reference Standards.
5. Federal Specifications (FS):
 - a. Reference Standards.
6. Product Standards (PS):
 - a. Referenced Standards.
7. Southern Pine Inspection Bureau (SPIB):
 - a. SPIB Standard Grading Rules.
8. West Coast Lumber Inspection Bureau (WCLIB):
 - a. WCLIB Standard Grading Rules.
9. Western Wood Products Association (WWPA):
 - a. WWPA Standard Grading Rules.
 - b. Recommended Nailing Schedule.

1.04 SUBMITTALS

A. Manufacturer's Data for Treated Lumber:

1. Submit treatment plant's data showing the lumber type, certification by the treating plant stating chemicals and process used, net amount of treatment retained, and conformance with applicable standards. Include a statement that moisture content of treated materials was reduced to a maximum of 15 percent prior to shipment to the Site.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Maintain 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.
- B. For lumber and plywood pressure treated with waterborne chemicals, provide space between each course to provide air circulation.

1.05 JOB CONDITIONS

A. Coordination:

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

PART 2 - PRODUCTS

2.01 MATERIALS

A. Lumber Standards, General:

1. Manufacture lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by ALSC Board of Review.
2. 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.
3. Nominal sizes are indicated, except as shown by detailed dimensions. Provide actual sizes as required by PS 20, for moisture content specified for each use.
4. Provide seasoned lumber with 19 percent maximum moisture content at time of dressing and shipment for sizes 2 inches or less in nominal thickness, unless otherwise indicated.

B. Grounds, Blocking, Plates, Nailers, and Similar Members:

1. Grounds, blocking, plates, nailers, and similar members shall be standard grade light framing size lumber of any species or board size lumber as required. No. 2 Common or Standard grade boards per WCLIB or WWPA rules, or No. 2 boards per SPIB rules.

C. Plywood Panels:

1. 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. E 445.
2. Factory mark each construction panel with APA trademark evidencing compliance with grade requirements.
3. Where construction panels are used for the following concealed types of applications, provide APA Performance-Rated Panels complying with requirements indicated for grade designation, span rating, exposure durability classification, and thickness:
 - a. Sheathing: APA Rated Sheathing.
 - (1) Thickness: as indicated.
 - (2) Exposure Durability Classification: Exterior.
 - (3) Span Rating: 16/0, 20/0, 24/0, as required to suit stud spacing indicated.

b. Backing Panels:

- (1) For mounting electrical or telephone equipment, provide fire-retardant treated plywood panels with grade designation, APA C-D PLUGGED INT with exterior glue, in 15/32-inch thickness unless otherwise indicated.

D. Fasteners and Anchorages:

1. 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.
2. Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners and anchorages with a hot-dip zinc coating pursuant to ASTM A 153.

2.02 WOOD TREATMENT

- A. Decay (Termite) and Fire treatment of the following lumber shall be in accordance with requirements described under Section 06300 - WOOD TREATMENT:

<u>Location</u>	<u>Treatment (General)</u>
Wood members in contact with concrete, used in connection with roofing, or exposed to moisture	Decay (Termite)
Sheathing	Decay (Termite) & Fire
Plywood backing panels for mounting electrical and telephone equipment	Fire
Concealed wood blocking and in general all wood in concealed spaces	Fire

PART 3 - EXECUTION

3.01 INSPECTION

- A. Examine the areas and conditions under which rough carpentry work is to be installed. Do not proceed with rough carpentry work until unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. General:

1. Material with defects which might impair the quality of the work, and units which are too small to fabricate with a minimum of joints or the optimum joint arrangement, shall be discarded.
2. All rough carpentry work shall be set accurately to required levels and lines, with members plumb and true, and accurately cut and fitted.
3. All rough carpentry work shall be securely attached to substrates by anchoring and fastening as shown, and as required for structural adequacy. On exposed rough carpentry work, nail

heads shall be countersunk, and holes filled.

4. Fasteners shall be of a size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Tight connections shall be made. Fasteners shall be installed without splitting wood; predrill as required.
5. Use washers where required for fasteners to avoid movement of material through loading and/or vibration.
6. Seal ends where exposed to moisture or where moisture could migrate via gravity, capillary action, expansion, or pressure gradients.

B. Wood Grounds, Plates, Nailers, and Blocking:

1. Wood grounds, plates, nailers, and blocking shall be installed where indicated on the Drawings, and wherever required for screeding or attachment of other work. Shapes shall be formed as shown and cut as required for true line and level of work to be attached.
2. 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 prior to concrete placement.

C. Plywood Panels:

1. Comply with applicable recommendations contained in Form No. E 30K, "APA Design/Construction Guide - Residential & Commercial", for types of plywood panels and applications indicated.
2. Fastening Methods: Fasten panels as follows, in strict accordance with the Florida Building Code, 2001 Edition, as amended:
 - a. Sheathing: Nail and/or screw to supports, as applicable.
 - b. Backing Panels: Nail and/or screw to supports, as applicable.

END OF SECTION 06100