

## SECTION 06100

## ROUGH CARPENTRY

1 PART 1 GENERAL

## 1.1 DESCRIPTION

- A. Includes all labor, materials, services, equipment and related items required for the complete installation of Rough Carpentry work as indicated by the Contract Documents.
- B. Related Work:
1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these specifications.
  2. Section 06400 - Finish Carpentry
  3. Section 08100 - Metal Doors and Frames
  4. Section 09250 - Gypsum Drywall

## 1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Meet Requirements and recommendations of applicable portions of Standard listed.
- |    |                                      |           |
|----|--------------------------------------|-----------|
| 1. | Products Standards                   | PS        |
| 2. | American Plywood Association         | APA, DFPA |
| 3. | Architectural Woodwork Institute     | AWI       |
| 4. | American Wood Preservers Institute   | AWPI      |
| 5. | National Forest Products Association | NFPA      |
| 6. | Southern Pine Inspection Bureau      | SPIB      |
- C. Material Grading
1. The grades of the materials used shall be defined by the rules of the recognized associations of lumber manufacturers producing the material specified, but the maximum defects permissible in any specific grade shall not exceed the limitations of the American Lumber Standards.
  2. Defects expressly prohibited by this Section shall not appear in the material used, even if permissible in the grade specifications.
  3. The sized specified are nominal board measure dimensions unless otherwise noted.

## 1.3 SUBMITTALS

- A. Submit product data in accordance with Section 01340.
- B. Certification:

1. Pressure treated wood: Submit certification by treating plant stating chemicals and process used, net amounts of salts retained, and conformance with applicable standards.
  2. Preservation treated wood: Submit certification for water-borne preservative that moisture content was reduced to 19% maximum, after treatment.
- C. Comply with pertinent provision of Section 01340.
- 1.4 PRODUCT HANDLING
- A. Immediately upon delivery to the job site, place materials in an area protected from water.
  - B. Store materials a minimum of 6" above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation and ventilation.
  - C. Do not store seasoned materials in wet or damp portions of building.
  - D. Protect fire retardant materials against high humidity and moisture during storage and erection.
  - E. Protect sheet materials from corner breakage and surface damage, while unloading.
  - F. Comply with pertinent provisions of Section 01640.

## 2 PART 2 PRODUCTS

### 2.1 MATERIALS

- A. Framing Lumber: Grade marked, No. 2 com. Southern Yellow Pine or construction grade Douglas Fir and KD Spruce, moisture content under 19% free of warp that cannot be corrected by nailing, S4S.
- B. Bracing, Blocking and Grounds: Grade marked No. 2 com. Southern Yellow Pine or construction grade Douglas Fir or KD Spruce, moisture content under 19%, S4S.
- C. Rough Hardware: Nails, spikes, screws, bolts, etc., shall be of the proper types and sizes, and used in such numbers and quantities as is the usual custom in good practice for securing the various items and members. Underlayment fasteners shall be 3d (1 1/4") ring or screw shank nail, min. 12 1/2 gauge (0.999 in) shank diameter.
- D. Plywood: Use 19/32 C-D Exterior grade Fir or Yellow Pine, DFPC grade stamped, or as follows:
  1. shear walls: 5/8" thick, APA Rated sheathing, Exp 1
  2. roof deck: 5/8" thick, APA Rated sheathing, 40/20
  3. other applications: as noted on drawings
- E. Plywood backer board at electrical, telephone video and alarm equipment: 3/4" APA rated A/C Plywood, Exterior.
- F. Manufactured Lumber (LVL) shall have the following minimum properties:

1. Modulus of Elasticity: 1,800,000 psi
  2. Flexural Stress:  $F_b = 2,400$  psi
  3. Tension Parallel to Grain:  $F_t = 1,800$
  4. Compression Perpendicular to Grain:  $F_c = 750$  psi
- G. I-Beams shall be manufactured wood beams consisting of LVC top and bottom chords and a plywood web. The beams shall be capable of supporting the loads indicated on the drawings and have a Live Load Deflection less than  $l/300$ . Provide web blocking where necessary to meet reaction loads indicated on the drawings.

## 2.2 PRESERVATIVES

- A. Use lumber pressure treated with a water-borne salt preservative, Wolman, Erdalith, or Chemowater Zinc Chloride in accordance with AWPI Specifications P-5 for abutting concrete or masonry in damp locations, where in contact with the ground, concrete, plaster, stucco or steel, including use for sills, plates, screeds, cant strips, blocking, nailers and bucks.
- B. Reduce moisture content to 19% or less after treatment for 2" thick lumber.
- C. Reduce moisture content to 23% or less after treatment for over 2" thick lumber.
- D. Furnish certificate from lumber treating company showing treatment amount and moisture content after drying.
- E. Brush coat surfaces that have been cut after treatment with preservatives.

## 3 PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Cutting and Repairing: Do such work as normally required and done for mechanical and other trades.
- B. Blocking: Furnish and install blocking, furring, brackets, etc., as required to properly carry out all work shown and reasonably inferred by the Drawings and Specifications.
- C. Nailers and Wood Cants: Nailers, 2" stock unless otherwise noted, of the proper widths. Bevel nailers for concrete  $1/2$ " both sides and properly place in forms. Bolt nailers in place on steel or masonry. Furnish ledgers bolted to wall in locations shown and as required.
- D. Shoring: Furnish and place all necessary shoring and bracing of types and sizes best suited for the conditions to be met. Shoring must comply with all governing requirements.
- E. Provide wood curbs, required blocking and cants around all openings through the roof indicated on all architectural, mechanical and electrical drawings. Check drawings for all trades and furnish for all openings indicated.
- F. Studs for interior walls shall be solid and continuous from floor plates to double plate at trusses, and shall not be cut for straightening; warped studs shall be replaced.
- G. Studs shall be doubled at all corners, openings, and beam bearing points, unless noted otherwise on the drawings.

- H. Headers over openings in walls shall be as noted on structural drawings.
- I. Plywood Backer Boards: 5/8" pressure treated plywood installed over gypsum board fastening into studs 8" o.c., typical. Seal all vertical joints, and top, bottom and ends with Tremco Sealant.

END OF SECTION