SECTION 061000

ROUGH CARPENTRY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Structural floor, wall, and roof framing; built-up structural members; wall and roof sheathing; subfloor sheathing; preservative treatment; sill gaskets.
- B. Blocking in wall and roof openings; wood furring and grounds; concealed wood blocking.

1.2 QUALITY ASSURANCE

- A. A Grade Mark or Trademark of an Agency certified by the Board of Review of the American Lumber Standards Committee is required on each piece of dimension and board lumber (or bundle in bundled stock).
- B. Softwoods: Conform to DOC Simplified Practice Recommendations R-16-53 "American Lumber Standards for Softwood Lumber", PS 20.
- C. Plywood: Conform to U.S. Product Standards PS-1.
- D. Moisture Content shall not exceed:
 - 1. 19% for lumber (S-Dry);
 - 2. 12% for plywood;
 - 3. 15% for blocking adjacent to finish millwork (MC15).
- E. Preservative Treatment to conform to AWPB standards LP-22.
- F. Work that is to be exposed, or finished or painted shall be free from defects or blemishes on surfaces that will be exposed to view.

PART 2 PRODUCTS

2.1 DIMENSION LUMBER

- A. Rough Lumber: Dressed four (4) sides (S4S), air or kiln dried and surfaced Dry (S-Dry), well seasoned, sound and free from splits, cracks, shakes and wanes; loose or unsound knots, excessive warp, vermin and decay.
- B. Douglas Fir-Larch, HemFir, Southern Pine or other locally available species of not less than the following design values:

<u>Size</u>	<u>Grade</u>	<u>Fb</u>	<u>Fv</u>	<u>Fc</u>
1. 2" to 4" thick, 2" x				
2" & wider	SPF	875	70	1100
	No 1/No	2		

2. Beams and lintels SPF 875 70 1100 No. 1/No.2

2.2 GLUE LAMINATED GIRDERS AND HEADERS – MICROLLAMS & PARALLAMS

- A. 1 3/4" thick, Fb=2925 psi, E=2,000,000 psi or as noted on the Drawings
- B. Each glue lam shall be identified with the grading trademark of the American Institute of Timber Construction.

2.3 BOARDS

- A. Non-stress rated.
- B. 5/4 and 1 x: No. 3 common pine, fir, spruce.

2.4 TREATED LUMBER

- A. Treated lumber shall be used in all locations where the lumber comes in contact with concrete or other cementitious material.
- B. Southern Yellow Pine
 - 1. Conforming to requirements of dimension lumber and boards.
 - 2. CCA (soluble salt) pressure treated per AWPB standard LP-22 with 0.40 lbs/cf retention.

2.5 FURRING

A. Merchantable Spruce, 1 x 3 or as indicated.

2.6 FLOOR AND ROOF SHEATHING

- A. Each panel of plywood shall be identified with grade-trademark of the American Plywood Association (APA).
- B. Grades and thicknesses shall be indicated on drawings and generally as follows:
 - 1. Type A: Floor Sheathing Sub-floor
 One Layer: Huber Advantech Sub-Flooring 25/32" thick Tongue and Groove edges glue screwed or power nailed to the joists/wood trusses.
 - 2. Type B: Roof Sheathing

Huber Advantech Roof Sheathing 5/8" Thick power nailed to Joists/Roof Trusses

- 3. Type C: Sound Board (All Wood Floors)
 Homosote 440 Sound Barrier Flooring ½" thick
- 4. Type D: Floor Underlayment (All Wood Floors) 5.5 mm Underlayment board approved by the resilient flooring manufacturer and contractor equal to Ultraply Underlayment Manufactured by Moreland Company USA.

2.7 FURRING

A. Merchantable Spruce, 1x3 or as indicated.

2.8 WALL SHEATHING

- A. Zip System Sheathing, 7/16" thick, with Zip System Tape at all seams.
- B. Each panel shall be identified with grade-trademark.
- C. Grades and thicknesses shall be indicated on Drawings and generally as follows: Type A: Exterior Wall Sheathing Zip Sheathing, 7/16" thick

2.9 ACCESSORIES

- A. Fasteners: Galvanized steel for exterior, high humidity, and treated wood locations, plain finish elsewhere.
- B. Die Stamped Connectors: Thickness as required, galvanized steel.
- C. Joist Hangers: Galvanized steel, sized to suit framing conditions.
- D. Anchors: Expansion shield and lag bolt type for anchorage to solid masonry or concrete.
- E. Hurricane Ties: Equal to Simpson H Series.
- F. Sill Gasket on Top of Foundation Wall: Plate width, closed cell foam or glass fiber strip.
- G. Sill Flashing (Under Sill Gasket): Polyethylene sheet.
- H. Subfloor Glue: APA AFG-01, water base, waterproof.
- I. Wall Sheathing Tape: Zip System Tape at all wall sheathing joints
- J. Roof Sheathing "H" Clips

PART 3 EXECUTION

3.1 FRAMING

- A. Erect wood framing members in accordance with applicable code. Place members level and plumb. Place horizontal members crown side up. Align regularly spaced first floor studs, floor trusses, second floor studs and roof trusses.
- B. Place sill gasket directly on foundation.
- C. Frame double joist headers at floor and ceiling openings. Frame rigidly into joists. Frame double joists under wall studding.
- D. Bridge joists framing in excess of 8 feet at mid-span members. Fit solid bridging at ends of members.

- E. Curb all roof openings except where curbs are provided. Construct curb members of single pieces per side.
- F. Install Hurricane Ties 2'-0" O.C. between:
 - 1. First Floor Ext. Studs & 2nd Fl. Framing.
 - 2. Second Floor Framing & 2nd Fl. Ext. Studs.

3.2 SHEATHING

- A. Install subfloor sheathing perpendicular to floor framing with end joints staggered. Secure sheet edges over firm bearing. Attach sheathing with subfloor glue and screws or shank nails.
- B. Install wall sheathing in accordance with the manufacturer's requirements. Secure wall sheathing with ends staggered, over firm bearing. Tape all joints and terminations with Zip System Tape in accordance with the manufacturers requirements.
- C. Place vertical sheathing around entire building.
- D. Use sheathing "H" clips at joints in the plywood roof sheathing between roof framing members.

3.3 SITE APPLIED WOOD TREATMENT

- A. Site apply preservative treatment in accordance with manufacturer's instructions.
- B. Treat site-sawn cuts. Brush apply one coat of preservative treatment on untreated wood in contact with cementitious materials.
- C. Allow preservative to cure prior to erecting members.

END OF SECTION