

SECTION 06 10 00 - ROUGH CARPENTRY

PART I - GENERAL

1.1 MATERIAL SELECTION

- A. Metal versus Wood: *[Note to AE: This section includes pressure treated wood for framing. Note that metal stud framing for walls, especially those in direct contact with a slab on grade or foundation wall, is preferable to wood studs. Modern soil poisoning chemicals have a fairly short life span. In addition, the cost of metal studs does not differ appreciably from the cost of wood studs, and the metal, by nature, is not affected by termites. Also, there is growing concern over mold in buildings, and metal does not support fungal growth.]*

1.2 SUBMITTALS

- A. LEED Submittals: Provide certificates, Product Data and Laboratory Reports as required for LEED Credits.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

2.2 PRESSURE-TREATED WOOD FRAMING

- A. Pressure-Treated Wood: *[Note to AE: Wood that has been pressure treated with ACQ (alkaline copper quat), CBA-A, and CBA-B (copper azole), and ACZA (ammoniacal copper zinc arsenate) is highly corrosive to adjacent metal construction including galvanized roof deck, most fasteners and architectural metal. Because of this, the architect/structural engineer must carefully consider all locations where those products may be used, and use them only where absolutely necessary, or where required by code. In many instances, the use of non-treated, construction grade wood is suitable for use in roof assemblies as blocking or nailers, provided reasonable measures are taken to ensure the non-treated wood remains reasonably dry when in service.]*
1. Where the wood is a) permanently exposed to weather, b) in direct contact with the ground, or c) in direct contact with masonry or concrete, wood shall be pressure treated with one of the above processes.
 2. SBX (sodium borate) treated wood may be used for locations not exposed to the elements, and not in direct contact with the ground, concrete or masonry.
- B. Fastening: All fasteners and sheet metal connectors used with pressure treated wood must have special coatings. ASTM A153 covers fasteners; ASTM A653 governs connectors.
1. For SBX (sodium borates) treated wood, fasteners must, at a minimum, be hot dipped galvanized with a G 60 coating.
 2. For ACQ (alkaline copper quat), CBA-A, and CBA-B (copper azole) treatments, use either hot dipped G-185 coating or stainless steel (304 or 316).
 3. For ACZA (ammoniacal copper zinc arsenate) treatment, use only 304 or 316 stainless steel.
 4. Fasteners with certain proprietary coatings are being marketed specifically for use with ACQ and Copper Azole treated wood. These fasteners may be used upon approval.
 5. Where there is any doubt that the treatment process will be clearly identified, all fasteners shall have the G185 coating or be stainless steel.

6. Carbon steel, aluminum and electroplated galvanized steel fasteners and connectors shall not be used in contact with treated wood.
- C. Where architectural metal (built in gutters, fascia, coping) are in direct contact with pressure treated wood, wood and metal shall be separated. Acceptable means of separation include:
 1. Self-adhesive rubberized asphalt membrane such as would be used for an ice dam membrane. See Division 7 for acceptable products and manufacturers.
 2. Fully adhered EPDM.

2.3 FIRE-RETARDANT-TREATED MATERIALS

- A. General: Where Fire-Retardant-treated materials are indicated, provide materials that comply with performance requirements in AWWA C20 for lumber and AWWA C27 for plywood. Identify fire-retardant-treated wood with appropriate classification marking of UL, U.S. Testing, Timber Products Inspection, or another testing and inspecting agency acceptable to authorities having jurisdiction.

2.4 WOOD DECKING

- A. Wood decking for floors shall be a minimum of one layer of 3/4-inch (nominal thickness) tongue and groove plywood consisting of at least 5 plies.
- B. Decking Material shall be Pine or Douglas Fir plywood. No strand board or particleboard will be allowed.
- C. Underlayment: Wood floors which will receive VCT or sheet goods shall have an additional layer of Luan Mahogany underlayment, installed with ring-shank nails or screws. No strand board or particleboard will be allowed.

2.5 WOOD SHEATHING

- A. Wood sheathing for sidewalls shall be 7/16-inch thick, minimum.
- B. Wood sheathing for roofs shall be 5/8-inch thick, minimum.

PART 3 - EXECUTION

3.1 WOOD FRAMING

- A. All wood framing, including joists, studs, furring, and strapping, shall be installed at 16 inches O.C. maximum. Exception: Manufactured trusses may exceed this spacing so long as engineering calculations demonstrate that a larger spacing is adequate.
- B. *If spacing is modified per engineering calculations for manufactured trusses, sheathing thickness shall be increased as appropriate, per requirements of manufacturer's grade stamp.*

3.2 WOOD DECKING

- A. All plywood decking shall be glued *and* screwed, installed perpendicular to framing members, with screws placed 8 inches on center maximum.
- B. Underlayment shall be installed so all joints are staggered over original joints in subfloor. Fasteners shall be installed at a maximum distance of 3 inches O.C. along the edges and a maximum distance of every 5 inches in both directions in the rest of the panel. The joints and fasteners shall then be filled with putty and sanded smooth.

END OF SECTION 06 10 00

This section of the *U of I Facilities Standards* establishes minimum requirements only.
It should not be used as a complete specification.